

THE MODERN ENDGAME MANUAL

Csaba Balogh
Adrian Mikhalchishin

Mastering Queen
and Pawn endgames



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Adrian Mikhalchishin

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Mastering Queen and Pawn endgames
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KEY TO SYMBOLS

=	Equality or equal chances
±	White has a slight advantage
∓	Black has a slight advantage
±	White is better
∓	Black is better
+-	White has a decisive advantage
-+	Black has a decisive advantage
∞	unclear
∞	with compensation
↔	with counterplay
↑	with initiative
→	with an attack
Δ	with the idea
□	only move
N	novelty
!	a good move
!!	an excellent move
?	a weak move
??	a blunder
!?	an interesting move
?!	a dubious move
+	check
#	mate

INTRODUCTION

The first book of the series “The modern endgame manual” is a combination of king & pawn endgames and queen & pawn endgames. The pawn endgames consist of 5 main chapters with a graduation to 35 different topics. The queen endgames consist of 3 main chapters with a graduation to 15 different topics.

King and pawn endgames, compared with others, are relatively direct and can often be calculated to the end, and that’s why the value of each move is much higher than in other endgames with multiple pieces on the board.

Every single move can change the evaluation of the position and “perfect” play is quite possible in most of them. In the majority of pawn endgames knowledge plays the most important role and, of course, the ability to accurately calculate long lines where both sides are aiming to promote their respective pawns. Throughout the book you will find many theoretical positions, many practical ones and also how the games developed in practical play.

Queen endgames are different because they revolve around a much smaller number of theoretical positions and typical manoeuvres. Therefore the real knowledge here is the ability to use — and evaluate correctly — the roles of the most important elements, such as passed pawns, centralized queens and king marches into the opponent’s camp.

The material inside this book is very useful for players at every level, from the complete beginner up to GM standard! After a deep study of this book you will be able to call yourself quite an expert, something you will hopefully prove in your future games!

EDITORIAL PREFACE

In this series of fourteen endgame books, FIDE Senior Trainer Adrian Mikhalchishin, FIDE Senior Trainer Efstratios Grivas and IGM Csaba Balogh combine their experience as trainers and as practical players to create something very special.

The authors aim for very understandable explanations of every endgame positions in the book.

The specification:

- ◆ 1st book — Queen and pawn endgames.
- ◆ 2nd book — Minor piece endgames (Bishop and knight endgames).
- ◆ 3–5 — These books are going to focus on the most common endgames, which are of course the rook endgames.
- ◆ 6–7 — These books will be a fight between different material constellations.
- ◆ 8th — This book will focus on the exchanges and simplifications.
- ◆ And the last six books will be a collection of practical examples for self-learning, with a lot of exercises covering all the different endgame topics.

The main concept of each book is to provide theoretical knowledge which can be used in practical games. It means the focus of the books will be on positions which are the most likely to occur and the practical playing of them.

That's why you will see first the theoretical part, and then the practical examples of how games actually continued in a particular endgame.

Yes, you're right, you will be not able to find too many very complicated studies, stunning manouevres or rarely-appearing positions — and there is a simple reason why!

How often do we see positions, for example two knights vs pawn where one knight is blocking the pawn and the other one tries to get the king to the corner before releasing the second knight for the mate — or constellations with crazy material on the board? This might happen once in a lifetime. You could

spend hundreds of hours working on something that might bring you “only” a single point more out of 100 games!

Our approach is quite different: let’s make more points in the other 99 games! And who knows, we might also be lucky in the remaining one, but actually, statistically, it would almost not matter.

In our modern chess world, with faster time-controls, we often have to play complex endgames surviving on 30 second increments after each move, therefore the importance of theoretical knowledge is now greater than ever.

“The modern endgame manual” series makes an expert out of you in most of the endgames which are going to appear in your long career as a chess player!

PAWN ENDGAMES

Pawn endgames are the closing part of the game. Despite the fact that there are no other pieces on the board beside the kings and pawns, they can be extremely complex and hard to play. Usually pawn endgames arise after several hours of play when we are already exhausted and lacking some energy to be in complete focus. Additionally, at this stage of the game, most often we are already short of time and of course all these things together make our task even harder to play this part of the game perfectly.

What can we do to improve our skills? In general, pawn endgames are about two things: Calculation and knowing theoretical positions.

The importance of knowing as many theoretical positions as possible is irreplaceable. First of all, we save a huge amount of time and energy, because we don't need to calculate the outcome of some concrete positions if we know from memory that

it is winning or a draw. We can much easier put the right evaluation at the end of a long line that we have calculated if we know many positions. So, throughout the book we will learn the most important theoretical positions. We would like to draw your attention to the two most important elements of pawn endgames, which are "passed pawns" and "king activity"

About the calculation part: We often recommend for students who want to improve their calculation and visualisation to practice on calculating pawn endgames. There can be many different problems. For example, long and forced lines or short lines but with many variations. Just as in the middlegame, but here the options are more limited. However one mistake in calculation, missing a tempo or a hidden idea, can be decisive and might turn the game 360 degrees. Therefore calculation should be as precise as possible.

CHAPTER 1

THEORETICAL POSITIONS WITH 1 VS 0 PAWN

1.1. OPPOSITION

Opposition is one of the most important elements of the pawn endgames, therefore it is very important to study them in details and to learn and understand some basic theoretical positions.

There are several types of opposition:

- ◆ Direct opposition, e.g.: Kings on e4 and e6
- ◆ Distant opposition, e.g.: Kings on e2 and e6
- ◆ Diagonal opposition, e.g.: Kings on e4 and g6
- ◆ Side (Horizontal) opposition, e.g.: Kings on e4 and g4

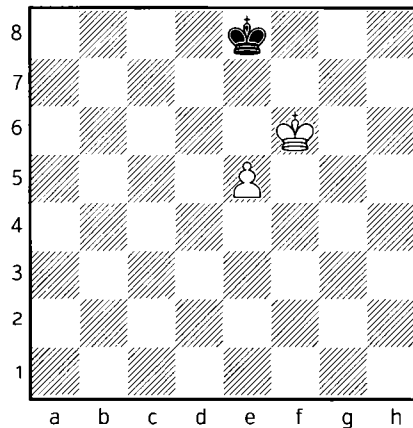
As you can see, there is always an odd number of squares between the two kings.

Taking the opposition basically means that we put our opponent into zugzwang. His king will have to leave its ideal position, which allows us to gain some direct benefits. Opposition and zugzwang are two highly important topics in pawn endgames and we

will discuss them in detail throughout the entire book.

1

THEORETICAL POSITION



It is very important to remember that if the king of the side with the extra pawn has reached the 6th rank then all positions are winning regardless of who takes the opposition. The only exception is when the stronger side has the h-pawn.

1. ♔e6!

The standard winning method is to squeeze the black king out from in front of the pawn by using the method of opposition. An early advance of the pawn would drop the win, as Black could take the opposition. 1.e6? ♚f8 2.e7+ ♔e8 3. ♔e6 with stalemate!

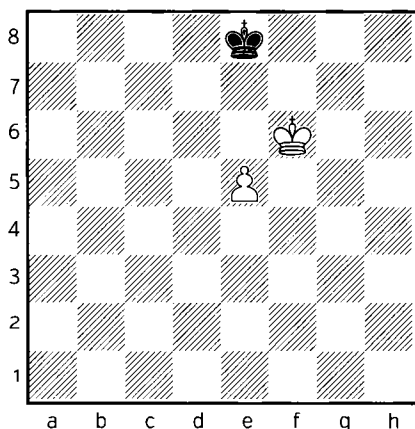
1... ♔d8

1... ♚f8 2. ♔d7!+- is the same.

2. ♔f7! ♔d7 3.e6+ ♔d6 4.e7+-

2

THEORETICAL POSITION



If the White king has reached the 6th rank, taking the opposition does not save the defending side because after

1... ♚f8

White cannot squeeze the king out like we saw in the previous example, but now

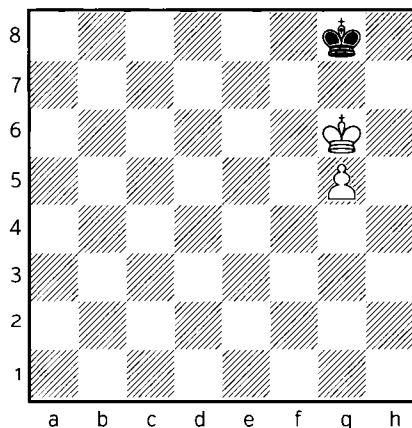
2.e6! ♔e8 3.e7

Black is on move and there is no stalemate motif

3... ♔d7 4. ♔f7+-

3

THEORETICAL POSITION

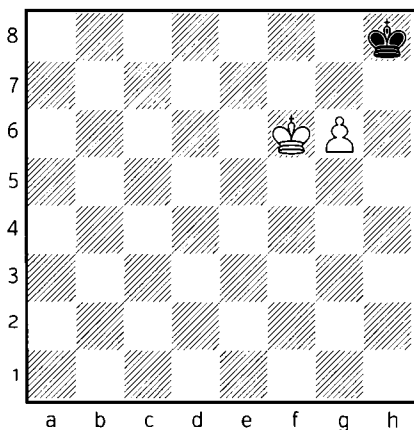


The win with the g-pawn is slightly trickier, but if we know on the winning plan, then it is also elementary.

1. ♔h6!

White wins only if he goes with his king to the h-file, otherwise Black can continue resisting by using a stalemate idea. The natural 1. ♔f6 is less accurate. A very funny/ strange story

happened to me once in a blitz game. I played against a 2650+ grandmaster whose name I don't want to mention. We reached this position, which I normally would resign as Black, but I thought I'd wait some moves until my opponent executed the winning plan. We were both down to 10 seconds, however the increment of 2 seconds per move should avoid any difficulties of converting the advantage. 1...♔h7 (1...♔f8 Taking the opposition does not help when the white king is on the 6th rank, White simply wins after 2.g6 ♖g8 3.g7 ♔h7 4.♔f7+-) Shockingly my opponent now played 2.g6+?? after which the game is drawn... (White still wins after reproducing the winning position by playing 2.♔f7! ♔h8 3.♖g6! ♖g8 4.♔h6!+-) 2...♔h8!



And the game is drawn as Black gets stalemated in each case. 3.g7+ (3.♔f7=) 3...♖g8 4.♔g6=

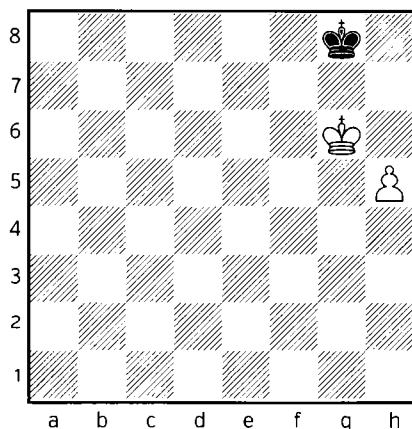
1...♔h8

The same defensive idea that we saw in the 1.♔f6 ♔h7 line is completely useless now as after 1...♔f7 2.g6+ ♔f8 3.♔h7+- there is no stalemate.

2.g6 ♖g8 3.g7 ♔f7 4.♔h7+-

4

THEORETICAL POSITION



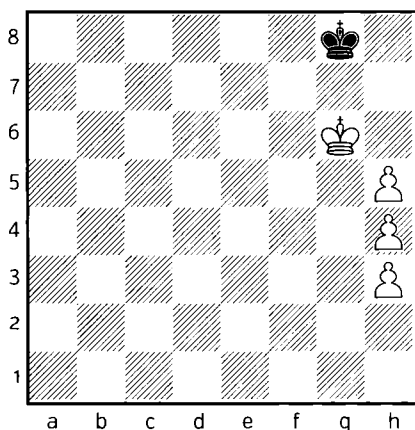
The h-pawn is an exception in many different endgames. The point is always the same, that the pawn endgame is drawn, regardless of who takes the opposition or of how far the pawn is advanced. If the black king has managed to enter into the corner, White cannot promote the pawn as there is always stalemate when the pawn reaches the 7th rank.

1.h6 ♔h8 2.h7

Even if it was White's move the game is drawn.

5

THEORETICAL POSITION



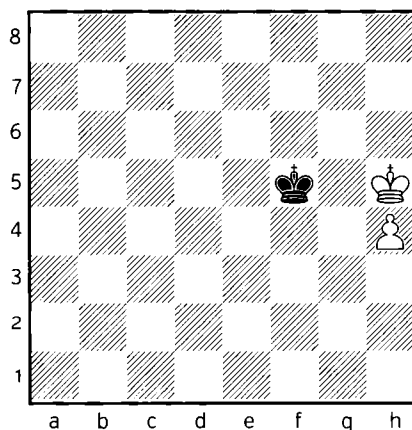
White can have as many h-pawn as he wants — it does not affect the final outcome if Black has reached the corner with his king. It always ends with the same stalemate which we have seen before.

1.h6 ♔h8 2.h5 ♔g8 3.h7+ ♔h8=

Conclusion: If the white king reaches the 6th rank, all pawn endgames are winning regardless of who takes the opposition. The only exception is when White has an h-pawn. With the g-pawn, we must know that the king has to the h-file, otherwise the stalemate idea might save Black.

6

THEORETICAL POSITION



Another very important idea to remember, which is frequently seen in many practical games and only existing in case of an h-pawn, is that despite the black king not having reached the corner, he still holds the draw by squeezing the white one on the h-file.

1.♔h6 ♔f6 2.♔h7 ♔f7 3.h5

Finally Black gets into zugzwang and he must allow his opponent to leave the h-file, but it still does not help.

3...♔f8

3...♔f6 is actually also draw as 4.♔g8 (4.h6 ♔f7= squeezes again to the h-file.) 4...♔g5= wins the pawn.

4.h6

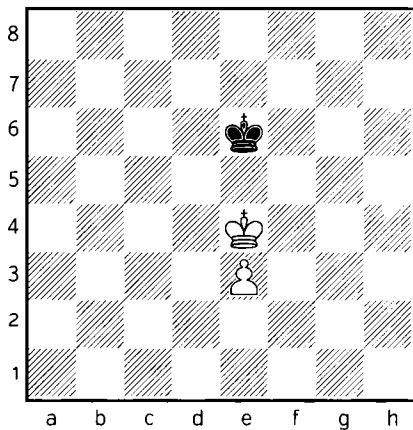
4. ♔g6 White could leave the h-file, but it allows Black to occupy the corner 4... ♕g8=

4... ♕f7 5. ♔h8 ♕f8 6. h7 ♕f7

Another stalemate with the h-pawn, this time with the white king squeezed into the corner.

7

THEORETICAL POSITION



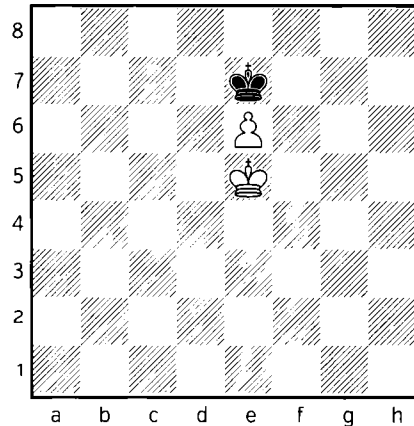
The following theoretical positions demonstrate the basic ideas that one must know about opposition. It is really relevant to understand them before going to more complex examples. In the current position, Black has just played ♕e6, taking the opposition and he holds the draw by keeping it in the entire course of the game.

1. ♕f4 ♕f6! Opposition!

2.e4

The only way to make progress, but now the pawn occupies the king's place, which prevents White from taking over the opposition after

2... ♕e6 3. e5 ♕e7 4. ♕f5 ♕f7 5. e6+ ♕e7 6. ♕e5



6... ♕e8!

Black must be ready to take the opposition depending on which side the white king tries to make progress from. Of course not 6... ♕f8?? allowing White to oppose with 7. ♕f6! ♕e8 8. e7+- wins.

7. ♕f6

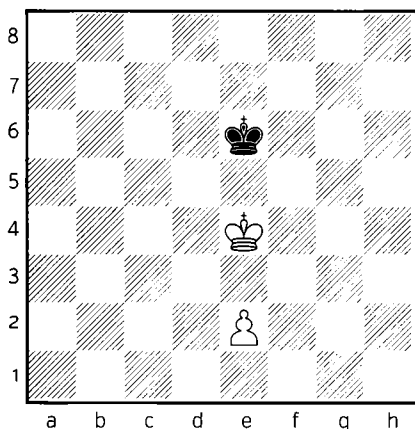
In case of 7. ♕d6 ♕d8! 8. e7+ ♕e8 9. ♕e6=

7... ♕f8 8. e7+ ♕e8 9. ♕e6=

Stalemate!

8

THEORETICAL POSITION



This is the logical follow-up to the previous position. Black has just played ...♔e6, and occupied the opposition. However, White is winning now. The huge difference lies in the placement of the e-pawn, which stands now on e2, giving the opportunity to waste a crucial tempo, which means that the opposition will be taken by White!

1.e3!

Here we are! Black to move and he is forced to move with his king.

1...♔f6 2.♔d5! ♔e7 3.♔e5!

Taking the opposition again! But not the premature 3.e4? which allows Black to oppose his king with 3...♔d7= and we reach the theoretical drawn position that we already know.

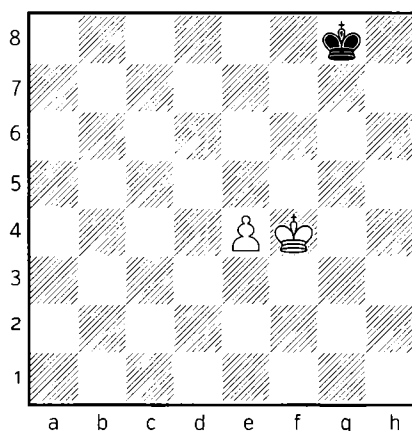
3...♔d7 4.♔f6!

White has reached the 6th rank with his king. We already know, that with the e-pawn it is winning in any case.

4...♔e8 5.♔e6 ♔f8 6.e4 ♔e8 7.e5 ♔f8 8.♔d7 ♔f7 9.e6+-

9

THEORETICAL POSITION



We already know how direct opposition works in practice when there is only one square between the two kings. Now, let's see some examples for the distant opposition, when there are 3 squares between the two kings. The method and the point is exactly the same as before. Both the defensive and the attacking side should aim for the opposition with the king. We already know the right move

1...♔f8!

Black must be able to take direct opposition in case of any progressive attempts by White. Obviously not 1... ♖f7? as it allows White to take the direct opposition with 2. ♖f5! ♖e7 3. ♖e5! ♖f7 4. ♖d6+-

2. ♖e5

On 2. ♖f5 ♖f7! holds.

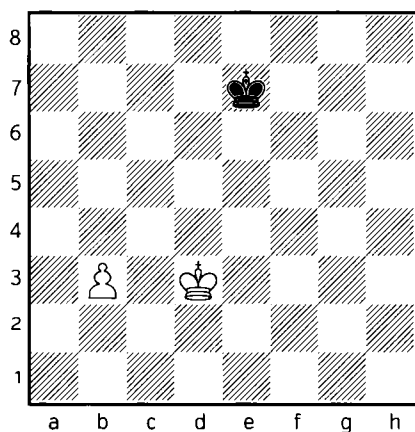
2... ♖e7! 3. ♖d5 ♖d7!

Holding the opposition and the draw.

4.e5 ♖e7 5.e6 ♖e8 6. ♖d6 ♖d8 7.e7+ ♖e8 8. ♖e6=

10

THEORETICAL POSITION



The same example, just in a slightly different version to the previous one is the following. Black holds by taking the distant opposition with his king.

1... ♖d7!

But not 1... ♖d6? which is met by 2. ♖d4! ♖c6 3. ♖c4 ♖b6 4. ♖b4! ♖c6 5. ♖a5+-

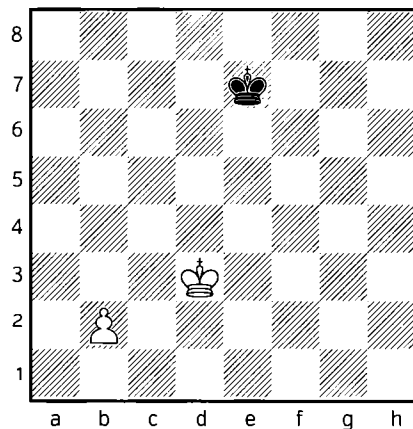
2. ♖c3

On 2. ♖d4 ♖d6! =

2... ♖c7 3. ♖b4 ♖b6 = with an easy draw.

11

THEORETICAL POSITION



A very small difference compared to the previous example is that we move the b3 pawn back to b2. Does it make any difference? Of course, it does. White can waste the crucial tempo to win the fight for the opposition. The distant opposition does not save Black here

1... ♖d7 2. ♖c4 ♖c6 3. ♖b4 ♖b6 4. b3!

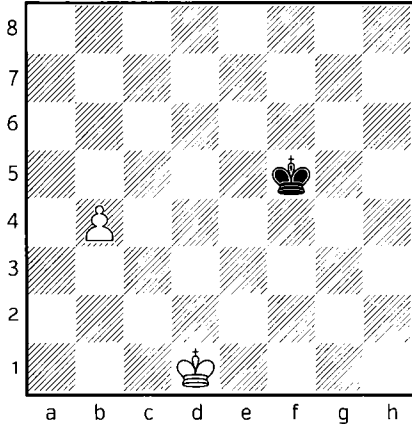
and White wins the fight.

4...♔c6 5.♔a5+-

1.2. SQUARE OF THE PAWNS

12

THEORETICAL POSITION



An unusual example, when White has to fight against Black's attempt to have the opposition. He can only do it by going around his pawn with

1.♔c2!

After some natural move like 1.♔d2 ♔e4 2.♔c3 ♔d5! White should play ♔b4 now, but it is not possible, while after any other moves the black king gets in front of the pawn 3.♔d3 (3.♔b3 is already too late 3...♔c6 4.♔a4 ♔b6=) 3...♔c6 4.♔c4 ♔b6=

1...♔e4 2.♔b3 ♔d5 3.♔a4 ♔c6
4.♔a5! ♔b7 5.♔b5!+-

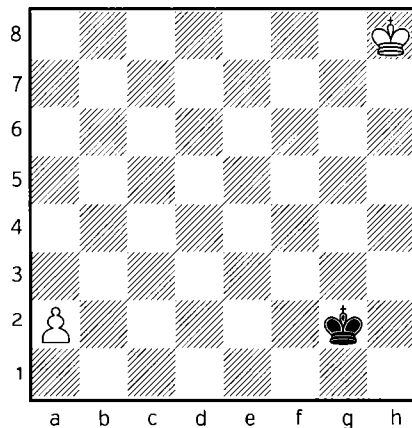
and White has won the fight for the opposition!

Another very important topic in pawn endgames is the square of a passed pawn.

In pawn endgames, each passed pawn must be counted as a potential queen, therefore it is very important to know at which moment the king can catch it and at which it is already promoting. An easy rule to draw the square of a passed pawn correctly is to count the number of squares until promotion and draw this number in the lines, or files, to the side. For example: an a5 pawn has 3 squares until the promotion, therefore the king can be 3 files to the side to still catch it. The square is between a5-a8-d8-d5.

1

THEORETICAL POSITION



In this case the square between the a2 pawn and the g2 king can be drawn between the squares a2-a8-g8-g2. Black's king stands inside the square, but of course in this particular example he cannot catch the pawn, as it can move directly to

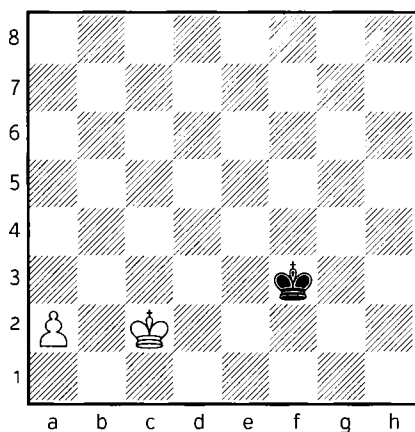
1.a4!

If in the initial position the pawn was on a3 and the king on f3. The square would be on a3-a8-f8-f3, and therefore Black catches the pawn.

**1...♔f3 2.a5 ♔e4 3.a6 ♔d5 4.a7 ♔c6
5.a8♚++-**

2

THEORETICAL POSITION



The black king is now in the square of the pawn, so it cannot be promoted by simply pushing it. However the white king can use his 'shoulder' to

avoid the Black king closing in on the pawn. This is another very important motif to keep in mind and we discuss it in detail in the upcoming chapters.

1.♔d3!

But not 1.a4? after which Black is in time with 1...♔e4=

1...♔f4

Black wants to go ♔e5, therefore White block its way again with

2.♔d4!

and so on until the end of the board...

**2...♔f5 3.♔d5! ♔f6 4.♔d6! ♔f7
5.♔d7 ♔f6**

And now it is already too late to turn back...

6.a4 ♔e5 7.a5 ♔d5 8.a6+-

The king again uses his shoulder to avoid ♔c6.

CHAPTER 2

THEORETICAL POSITIONS WITH 1 VS 1 PAWNS

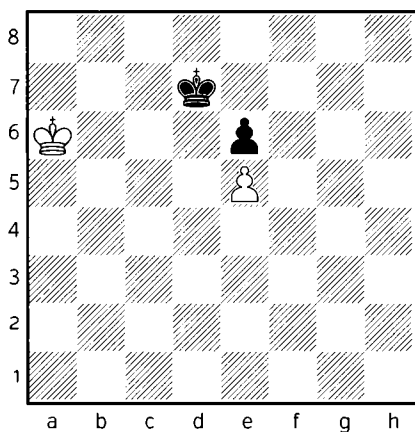
2.1. OUTFLANKING

Outflanking basically describes the motif where one king squeezes out the other king from behind the pawn by using the side and diagonal opposition. It is very important to know this idea as it is frequently seen in practical games and the stronger side must often use this motif to make progress.

The following examples are frequently seen in practical games. It is very important to know these motifs by heart instead of starting to calculate them over the board when they arise or at the end of some long line. We already know from the previous chapter that if White wins the e6 pawn and he has his king on the 6th rank he is winning, regardless who is to move. Despite the material balance, White wins the pawn by using the side opposition!

1

THEORETICAL POSITION



1. ♔b7! ♕d8 2. ♔c6 ♕e7 3. ♔c7!

Side opposition again!

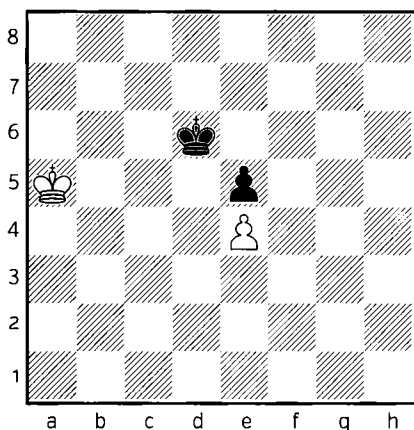
3... ♕e8 4. ♔d6 ♕f7 5. ♔d7

The pawn is lost and the rest is clear.

5... ♕f8 6. ♔xe6 ♕e8 7. ♔d6 ♕d8
8. e6 ♕e8 9. e7+-

2

THEORETICAL POSITION



Here we combine the knowledge that we have from the previous example and from the first chapter. We know that White can win the e5 pawn by using the side opposition. However the big difference is that the pawn is on the 5th rank (the white king does not reach the 6th rank), therefore Black can take the opposition and hold the draw...

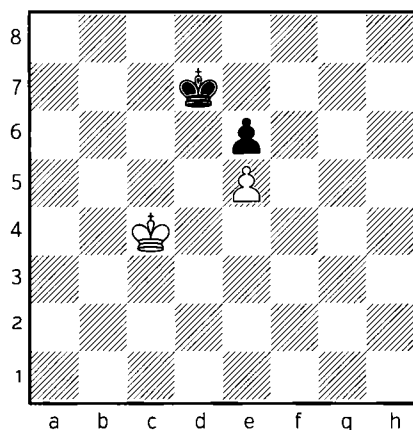
1. ♔b6! ♕d7 2. ♔c5 ♕e6 3. ♔c6 ♕e7
4. ♔d5 ♕d7 5. ♔xe5 ♕e7!

The pawn is taken, but it is insufficient for the win because of the opposition.

6. ♔d5 ♕d7 7. e5 ♕e7 8. e6 ♕e8 9. ♔d6
♕d8 10. e7+ ♕e8 11. ♔e6=

3

THEORETICAL POSITION



We are already familiar with three different kinds of opposition. The direct opposition, the distant opposition and the side opposition. In the current example, we get to know the fourth — and final — version of the opposition, which is called the diagonal opposition. The idea is the same as before — to oppose the kings by having between them an odd number of squares. By using this idea, White can again squeeze out the king, collect the e6 pawn and convert the endgame as his king is on the 6th rank...

1. ♔b5!

But not 1. ♔c5? ♕c7 and Black takes the opposition.

1... ♕c7 2. ♔c5!

White takes the opposition, forcing Black to free the way towards the e6 pawn.

2...♔d7 3.♔b6

And we have reached the first position of this chapter.

3...♔d8 4.♔c6 ♔e7 5.♔c7 ♔e8
6.♔d6 ♔f7 7.♔d7 ♔f8 8.♔xe6 ♔e8
9.♔d6 ♔d8 10.e6 ♔e8 11.e7+-

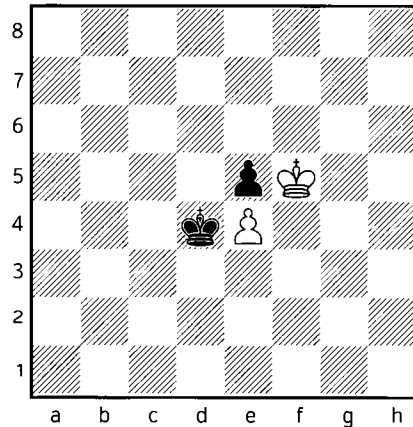
2.2. ZUGZWANG AND MUTUAL ZUGZWANG

If the side who is to move is forced to harm his own position with any of his legal moves, then we call the situation “zugzwang”. Another version of it is the mutual zugzwang, when depending on which side is to move, they lose.

Zugzwang is a common motif in pawn endgames and I would suggest a practical idea with which we can more easily find them — or hidden ones — is if we ask ourselves what would our opponent move if it was his turn?

1

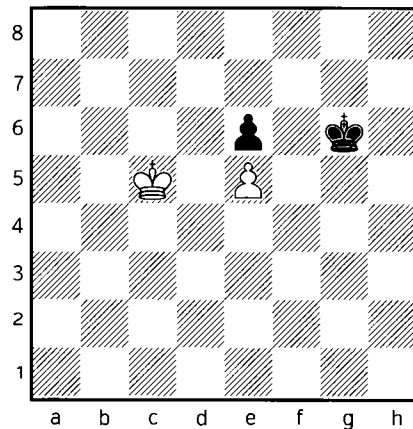
THEORETICAL POSITION



A classical example on the mutual zugzwang. Whoever is to move loses the pawn and the game.

2

THEORETICAL POSITION



The following example is also frequently seen in different versions in many practical games and it is another must-know motif for all the chess players. If we think a bit, we quickly realize, that the positions with the kings on d6 and f5 is a mutual zugzwang. If it is White's move he loses the e5 pawn, while in case of Black's turn the e6 falls. What should White do?

1. ♔c6!

By using the distant side opposition, White approaches the e6 pawn, keeping the d6 square free for the case when Black moves with his king to f5! The e6 pawn falls soon and the game is lost... Not 1. ♔d6?? ♕f5-+ as it is zugzwang for White!

1... ♕g5

If 1... ♕f5 2. ♔d6+- and now it is zugzwang for Black!

1... ♕f7 does not save the game as the white king is on the 6th rank... 2. ♔d7 ♕f8 3. ♔xe6 ♕e8 4. ♔d6 ♔d8 5. e6 ♕e8 6. e7+-

2. ♔d7!

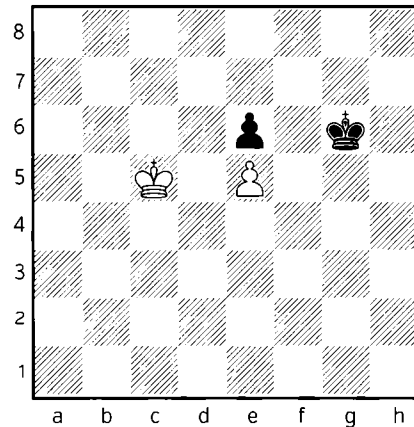
This is the point! White attacks the e6 pawn which forces Black to move to f5

2... ♕f5 3. ♔d6!

White creates the decisive zugzwang!

3

THEORETICAL POSITION



Let's examine what happens if it is Black's move! We already know that the f5 and d6 squares are poisoned, both sides should avoid moving there.

1... ♕g5!

This time Black uses the distant side opposition to approach towards the e5 pawn sidestepping the f5 square. Is he winning now with the same ideas that we have seen in the previous example? We know that the answer is no, as Black takes the pawn only on the 5th rank, White can turn back with his king to take the direct opposition.

2. ♔d4

But not forward with 2. ♔c6?? because of 2... ♕f4! 3. ♔d6 ♕f5-+

2...♔f4 3.♔d3 ♔xe5 4.♔e3!=
and the game is drawn.

2.3. PROMOTIONAL SQUARES

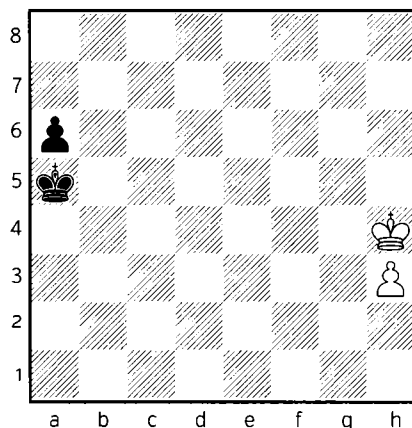
In endgames with pawn races it is difficult to suggest anything clever, except to always start your calculations with the push of the most advanced pawn :)

I would rather give three pieces of practical advice:

- ♦ Sometimes it is confusing to calculate a race, when we count like this — e.g. with pawns on g4 and b5 — that g5-b4-g6-b3-g7-b2-g8♔-b1♔. We might easily lose the thread somehow, especially in the heat of a practical game. Therefore, I recommend the practical idea of simply counting the squares towards the promotion and keep it in mind. With the same g4 and b5 pawns, we can easily calculate that both needs 4 moves towards the queening.
- ♦ Another practical idea is to calculate an extra move after the promotion of the pawn, because some hidden check or some other motif might affect the evaluation.
- ♦ Always consider for a moment the option of “underpromotion”. For example, we promote to a knight with check.

1

THEORETICAL POSITION



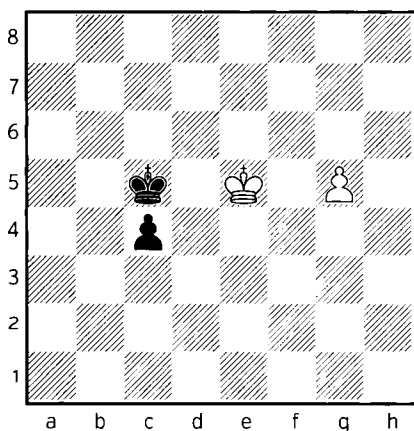
In the following example the pawns promote at the same time, but the white queen covers the promotion square of the opponent.

1.♔g4 ♔b5 2.h4 a5 3.h5 a4 4.h6 a3
5.h7 a2 6.h8♔+-

and the square a1 is covered.

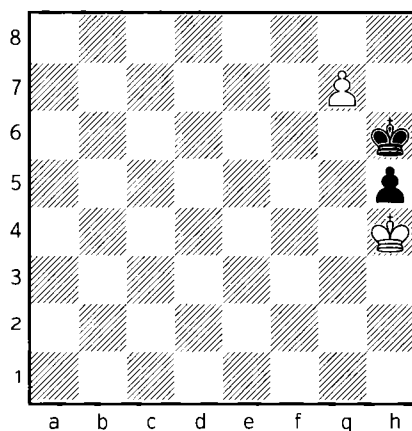
2

THEORETICAL POSITION



3

PRACTICAL POSITION



Another example on the same topic as the previous one. The pawns promote at the same time, but White has calculated a move further than the promotion and...

1.g6 c3 2.g7 c2 3.g8 ♖ c1 ♕ 4. ♕c8+!+-

White wins the queen and the game.

In the next example, White is promoting his pawn, but if he makes a queen suddenly the game is drawn by stalemate! Therefore he must underpromote to a rook to win.

1.g8 ♖!+-

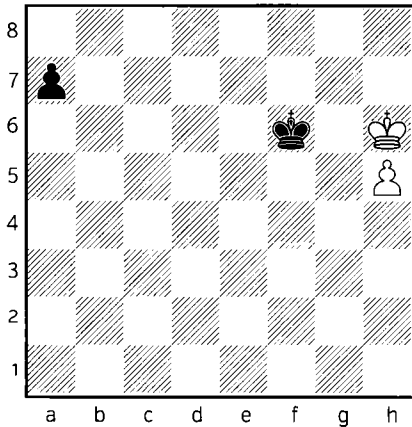
1.g8 ♕ =

2.4. SHOULDERING

If one of the kings does not allow the other one towards the “action area”, but blocks it’s way by using his shoulder, we call this motif “shouldering”. This is another common and important motif to remember.

1

THEORETICAL POSITION



In the previous chapters we saw that the h-pawn provides exceptions. Here is another exceptional, but common motif with the h-pawn. We have seen that without the a-pawn Black holds the draw by simply squeezing the white king to the h-file. We could believe that the same happens now, but Black not only holds the draw by squeezing the king, but also promotes the a-pawn and wins the game. However this does not really reflect the reality.

1. ♔h7 a5 2.h6

Of course not 2. ♔g8? with the idea being to promote the pawn faster and also with check, because of 2... ♔g5!

2... ♔f7

Black must waste a tempo on squeezing the king. 2... a4? loses to 3. ♔g8 a3 4.h7+-

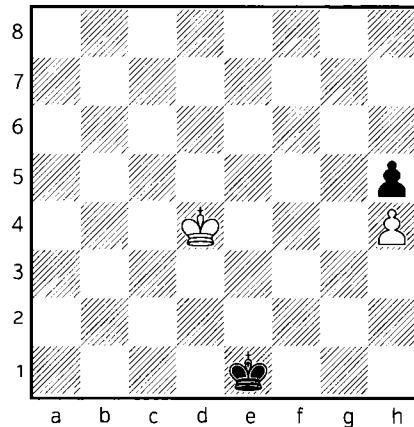
3. ♔h8 a4 4.h7!

White stalemates himself and holds the draw. Black cannot allow the king to escape as then he loses the pawn race.

4... a3=

2

THEORETICAL POSITION



We are already familiar with the motif of shouldering (keeping the opponent's king away from the pawn). The following example is very instructive. White to move and it is clear that he will arrive quicker at the pawn. However the problem is to avoid getting squeezed by the black king to the h-file. The solution is shouldering:

1. ♖e3!

keeping the king away from the 2nd rank and at the same time approaching to the h5. Any other moves allow
 1. ♖e4? ♜e2 2. ♖f4 ♜d3! 3. ♖g5 ♜e4
 4. ♖xh5 ♜f5! 5. ♖h6 ♜f6 The king is squeezed and the game is drawn.

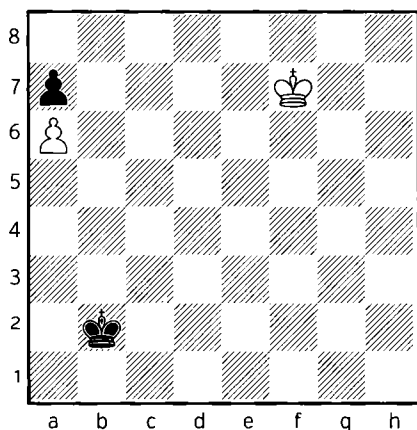
1... ♜d1 2. ♖f4 ♜e2 3. ♖g5 ♜f3
 4. ♖xh5

and Black is not in time to play ♜f5, thanks to the important tempo which was won by 1. ♖e3!

4... ♜f4 5. ♖g6+-

3

MAIZELIS
1925



A nice study by Maizelis on the topic of shouldering. The white king gets to b7 before Black can take the a6 pawn,

but Black wants to hold the draw by squeezing the king to the a-file. The only way to avoid it is

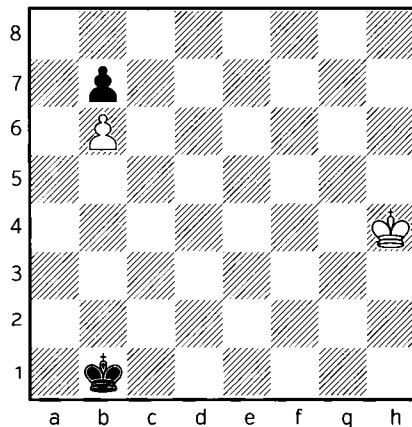
1. ♖e6! ♜c3 2. ♖d5!

Otherwise Black is in time to play ♜d4-e5-d6 and then ♜xa7 is met by ♜c7 with a draw.

2... ♜b4 3. ♜c6 ♜a5 4. ♜b7+-

4

GRIGORJEV
1929



The next study was composed by Grigorjev. Black is going to take the b6 pawn, which must be met by opposition with ♜b4. Surprisingly, White has only one way to achieve it...

1. ♖g3!

1. ♖g4? loses to 1... ♔c2! 2. ♖f4 ♕d3!
 Because of the shouldering, White cannot take the direct opposition with ♖b4... 3. ♖f3 (3. ♖e5 ♖c4 4. ♕d6 ♖b5 5. ♖c7 ♖a6--+ Mutual zugzwang, but White to move, therefore he loses.) 3... ♕c4 4. ♖e4 ♖c5 5. ♕d3 ♖xb6
 White has just failed 6. ♖c4 ♖a5--+

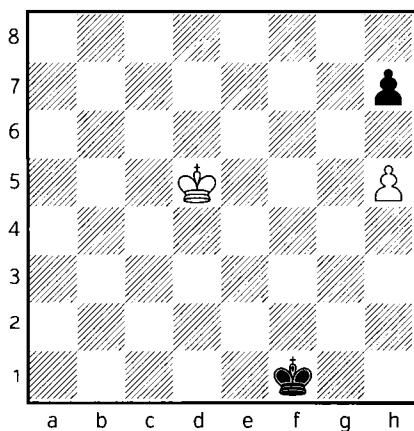
1... ♔c2 2. ♖f2! ♕d2 3. ♖f1!

The only move, but it is already easy if we are familiar with the subtleties of the position.

3... ♔c3 4. ♖e2 ♖c4 5. ♕d2 ♖b5
 6. ♖c3 ♖xb6 7. ♖b4=

5

▷ SZABO
 ▶ ALEXANDRESCU
 ROMANIA, 1952



In the next practical game, Black fails to find the way to squeeze the white king to the h-file.

1... ♖f2?

The right direction was 1... ♕e2!

A) 2. ♖e4 ♕d2! 3. ♖f5 ♖e3 4. ♖f6 ♖e4 5. ♖g7 (5. h6 ♕d5 6. ♖g7 ♖e6 7. ♖xh7 ♖f7=) 5... ♖f5 6. ♖xh7 ♖f6=;

B) 2. h6 ♕d3! 3. ♖e5 ♖c4! 4. ♖f6 ♕d5 5. ♖g7 ♖e6 6. ♖xh7 ♖f7=

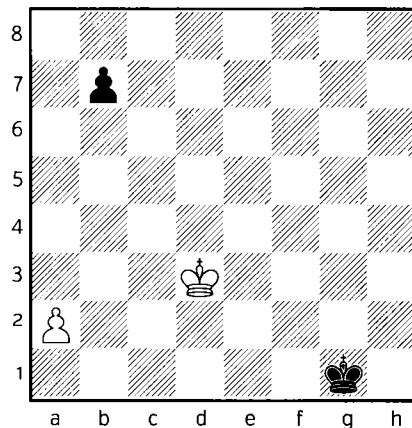
2. ♖e5 ♖e3

2... ♖g3 also loses to 3. h6 ♖g4 4. ♖f6+-

3. h6 ♕d3 4. ♖f6 1-o

6

ZINAR, 1984



This beautiful study by Zinar is another good example on the topic of shouldering.

1. ♖e2!

White wins very important time by cutting the black king away, allowing him to advance the a-pawn as far as possible, when the run towards the b7 pawn will then be decisive. 1. ♖c4 ♖f2 2. ♖c5 ♖e3 3. ♖b6 ♖d4 4. ♖xb7 ♖c4= would have been a draw.

1... ♖g2

Or after 1...b5 2.a3! ♖g2 3. ♖e3 ♖g3 4. ♖d4 ♖f4 5. ♖c5 ♖e5 6. ♖xb5 ♖d6 Black does not get into the corner. 7. ♖b6 ♖d7 8. ♖b7+-

2.a4! ♖g3 3. ♖e3!

Keep on shouldering!

3... ♖g2 4.a5 ♖f1 5. ♖d4 ♖e2 6. ♖c5 ♖d3 7. ♖b6+-

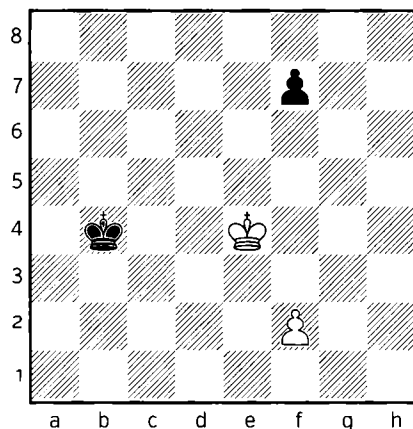
And Black fails by one tempo.

7

▷ V. MALAKHOV

▷ E. NAJER

MOSCOW, 2007



In the next practical game, a top Russian GM spoils the win which could have reached by using the shouldering method.

1. ♖e5?

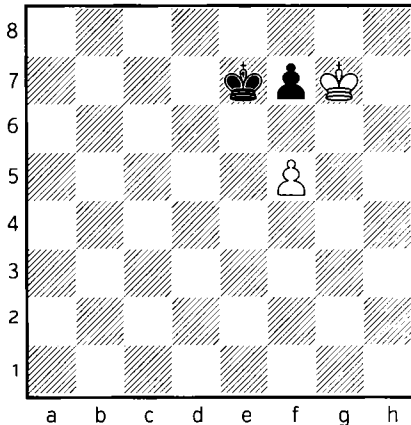
The shortest way is not always the best way! White should have kept the black king away from the f-pawns to win time to advance his f2-pawn as far as possible. The winning move was 1. ♖d4! ♖b5 (If Black tries to go around with 1... ♖b3 2.f4! ♖c2 3.f5 ♖d2 4.f6 ♖e2 5. ♖e5 ♖f3 6. ♖d6 ♖f4 Black fails by one tempo. 7. ♖e7+-) 2. ♖d5! ♖b6 (2... ♖b4 3.f4 ♖c3 4.f5 ♖d3 5.f6+-) 3. ♖d6 ♖b5 4.f4 (4. ♖e7 ♖c5 5.f4 ♖d5 6.f5 is also winning.) 4... ♖c4 5.f5 ♖d4 6.f6 ♖e4 7. ♖e7+-

1...♔c5!

But not 1...♔c4? which loses to 2.f4!
♔d3 3.f5 ♕e3 4.f6 ♔f3 5.♔d6 ♔f4
6.♔e7+-

2.f3

2.f4 is no longer enough 2...♔c6 3.f5
(3.♔f6 ♔d5!=) 3...♔d7 4.♔f6 ♕e8
5.♔g7 ♕e7!=



A mutual zugzwang position. Now it is White's turn and he must make a draw with ♔g8, because after f6 ♔e6, it is him on move and he loses. If it was Black's turn now, ...♔e8 loses to f6, just as if he plays f6 because of ♔g6 and White takes the pawn and his king stands on the 6th rank.

2...♔c6 3.f4

3.♔f6 ♔d5=

3...♔d7 4.♔f6 ♕e8 5.♔g7 f5!

There was still a chance to make a mistake with 5...♔e7?? 6.f5+- and we have the mutual zugzwang position with Black to move.

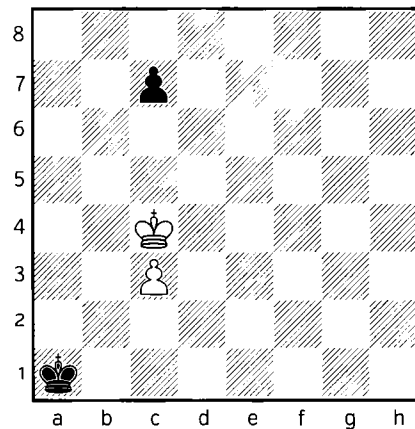
6.♔f6=

Draw agreed in view of the direct opposition with 6...♔f8 7.♔xf5 ♔f7.

1/2

8

THEORETICAL POSITION



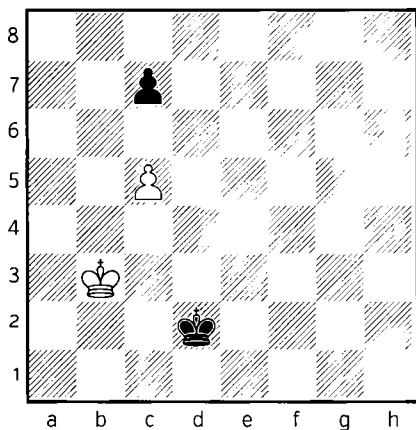
This beautiful study-like position shows the effectiveness of shouldering. I remember from my childhood when my coach showed me this position and it helped me to remember the motif all my life. I hope you will also like it and it will help you to acquire this idea. The logical outcome of the game is a draw, White wins the c7 pawn and at the same time Black

takes the c3. However the truth is different...

1. ♖b3!

Keeping the king away from the c-pawn. The winning strategy is to advance the c-pawn until the black king escapes from the corner and then go towards the c7 pawn. The execution still requires subtleties...

1... ♖b1 2. c4 ♖c1 3. c5 ♖d2



4. ♖c4!

Another shouldering! Keeping the king away from the d3 square and now White would like to push c6 followed by ♖d5-e6-d7. In other cases, Black could play 4. ♖b4 ♖d3 and he holds the draw.

4... ♖e3

Trying to get towards the pawn through e4, but White blocks the route with another shouldering! Oth-

er moves are not better either: 4...c6 5. ♖d4! Yet another shouldering! Preventing Black from approaching the pawn. 5... ♖c2 6. ♖e5 ♖d3 7. ♖d6+-

4... ♖c2 Black is ready to follow the king from the other direction. Let's say ♖d5 is met by ♖b3, while ♖b5 by ♖d3. However, the king cannot approach right now towards the pawn, which allows White to win a critical tempo. 5.c6!+- and White can win the c7 pawn next.

5. ♖d5!

Preventing ♖e4!

5... ♖d3

5... ♖f4 6. ♖c6+-

6.c6!

and Black should move to the 4th rank, ... ♖b4, to hold — but the king keeps it away.

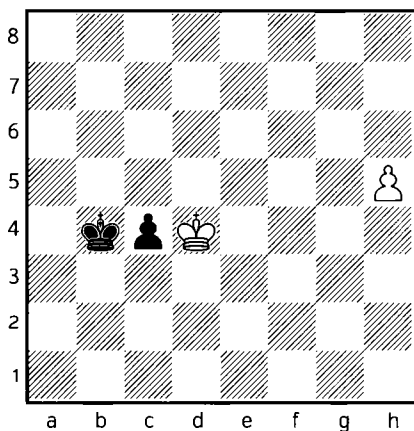
6... ♖c3 7. ♖e6 ♖b4 8. ♖d7+-

2.5. TRICKS FOR CATCHING A PASSED PAWN

In this chapter we examine some unusual ideas with which it is possible to catch a passed pawn or win a tempo in the pawn race for the promotion.

1

THEORETICAL POSITION

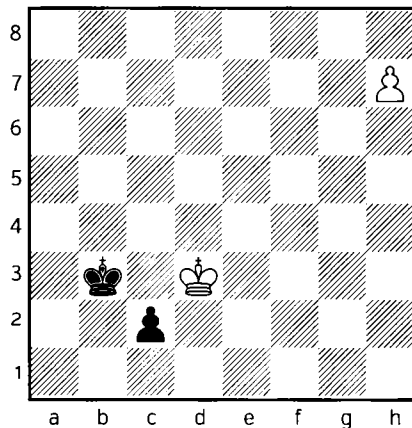


In the next couple of examples we get to know about another very useful and instructive pawn endgame idea, which can be seen in many practical games. The pawns are promoting at the same time and so at first sight the game should end in draw. However, with the help of a subtle manoeuvre White can promote his pawn with a check...

1.h6 c3 2.♔d3!

2.h7 right away leads to a draw. 2...c2
3.h8♙ c1♙ =

2...♔b3 3.h7 c2



4.♔d2!

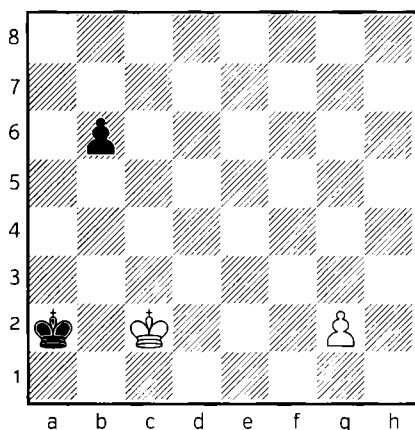
This is the point! Instead of promoting the pawn, White stops the promotion of the opponent's pawn, forcing the black king step onto a "mined" square.

4...♔b2 5.h8♙+++

Check, and White wins!

2

GRIGORIEV



The following study by Grigoriev demonstrates as well the same topic as the previous example, just in a more complex and more beautiful way. If White simple advances his pawn, Black promotes first because he wins an important tempo by playing b3 with check! Therefore White needs a more subtle manoeuvre:

1. ♖c3!

1.g4 leads to a draw after 1...b5 2.g5 b4 3.g6 b3+ 4. ♖c3 b2 5.g7 b1♚ 6.g8♚+ The pawn promotes with check, but White cannot give mate to the king in the corner. 6...♖a1=

1... ♖a3

Black needs his king to support his pawn.

2. ♖c4 ♖a4

White could repeat the moves with 3. ♖c3 ♖a3, but he can play for more...

3.g4! b5+ 4. ♖d3!

It is very important to save all the tempi that Black could gain by advancing his pawn with check. White is threatening to stop the pawn with ♖c2-b1, therefore Black needs his king's support again. Not 4. ♖c3 because it allows 4...♖a3 5.g5 b4+ Tempo! 6. ♖c2 ♖a2 7.g6 b3+ 8. ♖c3 b2 9.g7 b1♚ 10.g8♚+ ♖a1=

4... ♖a3

4...b4 loses to 5. ♖c2! ♖a3 6. ♖b1+- and the g-pawn promotes.

5.g5 b4 6.g6 b3

Neither of the pawn pushes are coming now with check, which allows White to promote his queen first — but of course a last subtlety is still needed.

7.g7 b2 8. ♖c2!

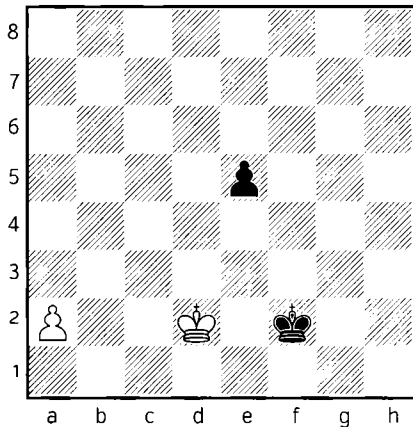
Forcing Black to move onto the poisoned square.

8... ♖a2 9.g8♚++-

Check!

3

THEORETICAL POSITION



Here is another must-know motif, one which can often arise in practical endgames. White is way behind in promoting his pawn, he cannot compete with the more advanced e-pawn which wins another tempo with e3 check! However he can save the game by

1. ♔d3! ♚f3 2. ♔d2!

With the idea to move in front of the pawn after which the loss is out of question.

2... ♚f2

2...e4 3. ♔e1!=

3. ♔d3=

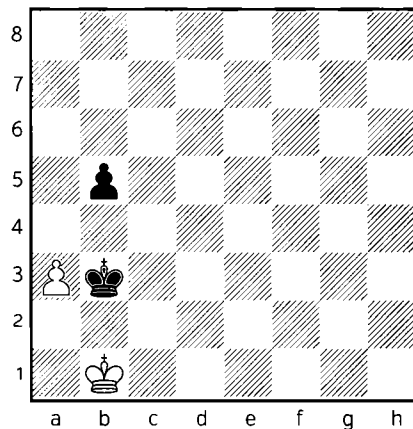
with repetition.

2.6. TRANSPOSITION INTO A DRAWN END-GAME

Sometimes with a sacrifice or a simplification we can transpose into a theoretical endgame. In this chapter we examine some examples where this is the only way for the defensive side to survive.

1

THEORETICAL POSITION



Black is going to take the a-pawn and with the king on the 3rd rank (it is the same as the white king on the 6th rank) he obtains a winning position. However the game can be saved by

1.a4!

White either manages to take opposition or the a-pawn cannot win against the king in the corner.

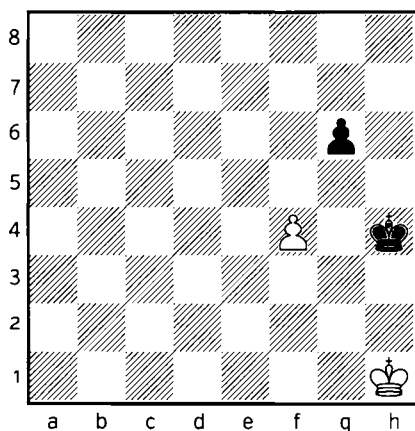
1...♔xa4

1..bxa4 2.♔a1=

2.♔a2! ♔b4 3.♔b2=

2

THEORETICAL POSITION



A slightly more complex follow-up to the previous example. Here Black soon wins the f4 pawn but despite the fact that White can take the opposition on f2, he cannot hold, because Black has a spare tempo with g6-g5 which wins the critical tempo for him. However the game can still be saved by

1.f5!

Other moves are losing: 1.♔h2 ♔g4 2.f5 ♔xf5! (But not 2...gxf5? which leads to a draw after 3.♔g2=) 3.♔g3 ♔g5!-+;

1.♔g2 ♔g4 2.f5 (2.♔f1 ♔xf4 3.♔f2 ♔g4 4.♔g2 g5!-+ wins the fight for the opposition.) 2...gxf5 3.♔f2 ♔f4-+

1...gxf5

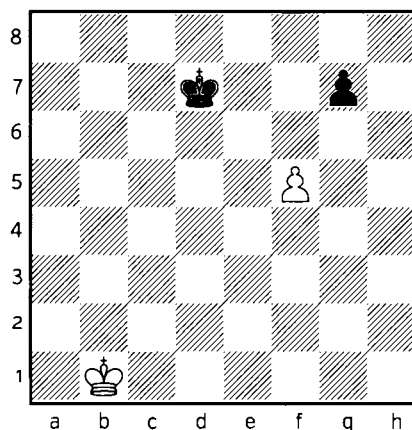
and only now

2.♔h2! ♔g4 3.♔g2 ♔f4 4.♔f2=

The game is drawn.

3

MORAVEC



The following study by Moravec is a nice example to illustrate the distant opposition.

1.♔c2 ♔d6

1...♙e7 is too slow 2.♙d3 ♙f6 3.♙e4=

2..f6!

This is the right moment to sacrifice the pawn and occupy the distant opposition afterwards. If Black had taken the pawn on f5, he would have saved the very important g7-g6 tempo for the future to give the move to White in the opposition. 2.♙d3? ♙e5 3.♙e3 ♙xf5 4.♙f3 ♙g5 5.♙g3 g6!-+

2...gxf6 3.♙d2!

Here comes the distant opposition.

3...♙e6 4.♙e2! ♙f5 5.♙f3=

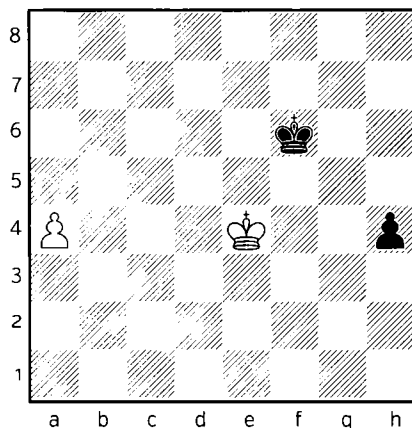
And White has reached the theoretically drawn position.

2.7. SQUARE OF THE PAWNS

Compared to the 1.2 chapter, here we will check some more complex positions, including two studies in which a seemingly unstoppable passed pawn can still be caught despite the king being outside its square.

1

THEORETICAL POSITION



This example belongs to the topic of being in the square of a pawn. The square of the white pawn (where the black king could catch it) is on a4-a8-e8-e4, while the black one is on h4-h1-e1-e4. From this we can already see the outcome. White wins after

1.a5!

But not 1.♙f4? The early catch of the passed pawn allows Black into the square of the a-pawn 1...♙e6=

1...h3 and now

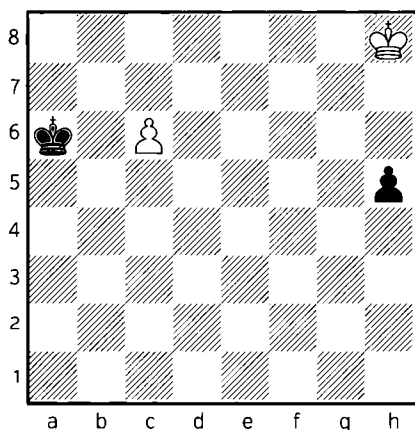
2.♙f3! h2 3.♙g2

White is in time, while Black just fails to catch the pawn...

3...♙e5 4.a6 ♙d6 5.a7+-

2

RETI



The famous study from Reti is a nice exception. Sometimes passed pawns can be stopped despite not being in the square of them. For this he obviously needs the inclusion of the c-pawn.

1. ♔g7 h4 2. ♔f6

White approaches towards the h-pawn and at the same time he is ready to switch his support to his own passer.

2... ♔b6

On 2...h3 3. ♔e7! and both pawns promote after 3...h2 4.c7 ♔b7 5. ♔d7 h1 ♚ 6.c8 ♚+=

3. ♔e5! ♔xc6

On 3...h3 White switches direction again with 4. ♔d6! h2 5.c7 h1 ♚ 6.c8 ♚=

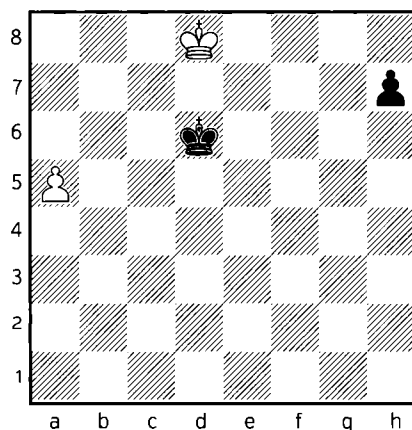
4. ♔f4!

and the miracle has happened. White has managed to catch the pawn.

4... ♔d5 5. ♔g4=

3

PROKES



A very similar study to the previous one was composed by Prokes. At first sight the game is lost, because White is not in the square of the h-pawn, while the black king is in the square of the a-pawn. However the game can be saved by

1. ♔c8!

1.a6? loses to 1...♔c6 2.♔e7 (2.♔c8
♔b6-+) 2...h5-+

1...♔c6

1...h5? even loses as Black cannot stop
the pawn anymore after 2.a6+-

2.♔b8!

White is threatening again with a6, as
he has a7 after ♔b6. Therefore Black
has to play

2...♔b5!

2...h5? 3.a6+-

3.♔b7!

Threatening again with a6! Black is
forced to take the passer, but then
the king gets into the square of the
h-pawn.

**3...♔xa5 4.♔c6 h5 5.♔d5 h4 6.♔e4
h3 7.♔f3=**

Just in time.

CHAPTER 3

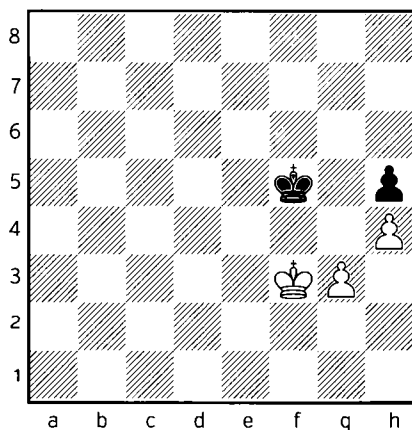
THEORETICAL POSITIONS WITH 2 VS 1 PAWNS

3.1. H+G PAWNS VS. H- OR G-PAWN

In this chapter, we are going to examine many theoretical positions when the stronger side has h- and g-pawns against only one in front of them. In two vs one pawn endgames, these are perhaps the most common in practice, therefore some positions are necessary and others are very useful to know.

1

THEORETICAL POSITION



The first diagram is an easy theoretical draw regardless who is on move. Black just waits with his king on the f5 and e5 squares. White cannot break through with his king, while the only way to make progress is g4, but then after hxg4, the black king gets back to the corner.

1. ♔e3 ♚g4

1...♔e5 is even simpler, but I would just like to demonstrate with the 1...♔g4 move that even if it is Black's move in our initial position the position is still drawn.

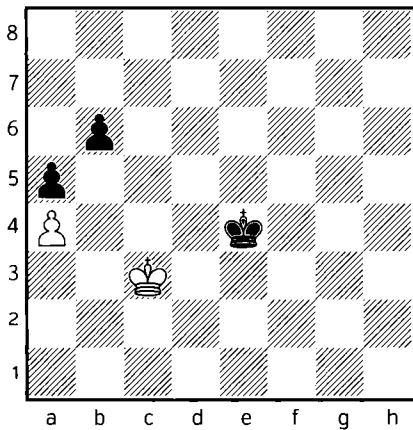
2.♔f2 ♔f5 3.♔f3

White has passed the move to Black compared to the initial position, but it does not affect the result.

3...♔e5 4.♔e3 ♔f5=

2

▷ P. OSTENSTAD
▷ A. KUZMIN
BIEL, 1990



How to win with Black?

1...♔d5?

Black should have tried the outflanking with 1...♔e3! 2.♔c4 (2.♔c2 ♔d4

approaching towards the a4 pawn move by move. 3.♔b3 ♔d3 4.♔b2 ♔c4 5.♔a3 ♔c3 6.♔a2 ♔b4-+) 2...♔d2! 3.♔b5 ♔c3 4.♔xb6 ♔b4-+ and White is not in time to squeeze the black king to the a-file.

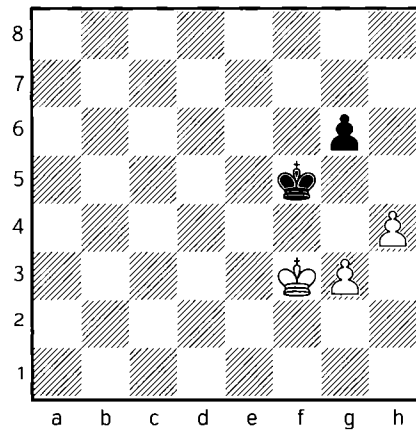
2.♔d3!

and White keeps the opposition and saves the draw.

1/2

3

THEORETICAL POSITION



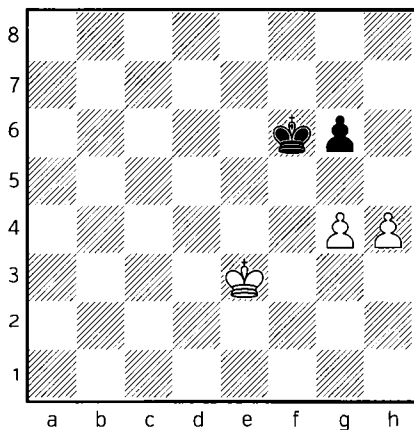
The next example is already extremely complex because the pawns are not fixed and it requires deeper study to understand the subtleties. However we can learn many ideas, therefore it is worth a closer look.

1.g4+

Here is the first big question — where should Black go with his king?

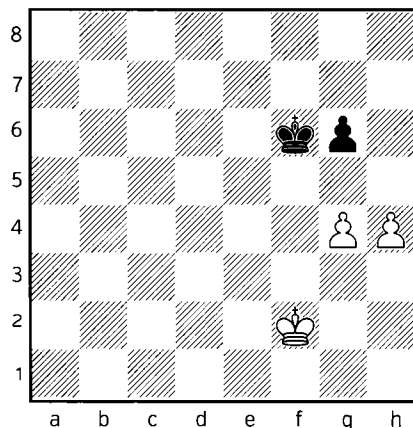
1...♔f6!

The only move! If White manages to cross the middle of the board with his king, the position is winning. Black has to prevent it at any cost. As we get closer, we will understand what is going on. The most natural 1...♔e5? loses because of 2.♔e3! White takes the opposition, which forces the black king to retreat 2...♔f6



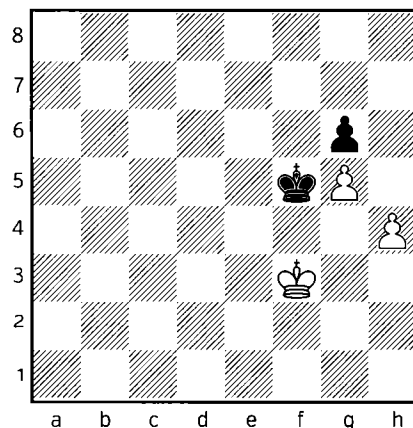
(After 2...♔d5 White invades with 3.♔f4 ♔e6 4.♔g5 ♔f7 5.♔h6 ♔f6 6.g5+ ♔f5 7.♔h7+-) 3.♔d4! The diagonal opposition! We already know this motif from the previous chapter. White reaches the 5th rank with his king. 3...♔e6 4.♔e4 ♔f6 5.♔d5! ♔f7 6.♔e5 ♔e7 7.g5! Thanks to this reserve tempo, White has won the opposition again and he breaks into Black's camp. 7...♔f7 8.♔d6+-

2.♔f2!?



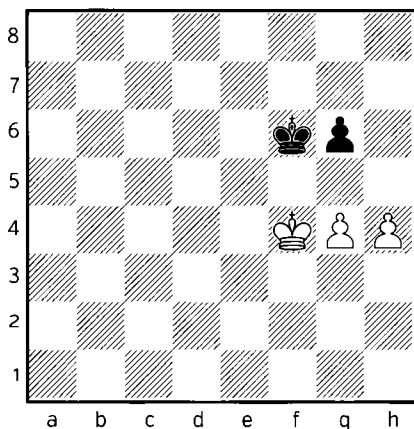
The trickiest move! White tries to make progress by taking the distant opposition! Black has to find another only move to hold! 2.♔e4 ♔e6 3.♔d4 (3.♔f4 ♔f6 4.g5+ ♔e6 is the same as 3.♔d4) 3...♔d6 Black is still in the square of the h-pawn and White cannot enter with his king. He must lose his tempo with 4.g5 ♔e6 5.♔e4 ♔d6 Black holds the draw as the breakthrough with h5 does not work and 6.♔f4 ♔e6 7.♔g4 ♔f7! 8.h5 gxh5+ 9.♔xh5 ♔g7= is just in time.

2.♔e3 ♔e5 3.g5 ♔f5 4.♔f3



This is another tricky position where Black must pay attention to the small details: 4...♔e6! (The natural 4...♔e5 loses again to 5.♔g4! and the black king is too far away to get in front of the pawn after h5. 5...♔e6 6.h5 gxh5+ 7.♔xh5 ♔f7 8.♔h6+- The king has reached the 6th rank.) 5.♔g4 (5.♔e4 ♔d6 we have seen in the 2.♔e4 line.) 5...♔f7 6.h5 gxh5+ 7.♔xh5 ♔g7=;

2.♔f4



Seems like a win, because the king invades either through g5 or e5. However here comes another motif, which is very useful to remember. 2...g5+! 3.hxg5+ ♔g6= and White is in zugzwang; he loses the g5 pawn next move.

2...♔f7!!

Brilliant, and yet another only move! White wanted to make progress by taking the distant opposition over the e-file. However Black awaits where the white king is going

to move and responds accordingly to take the distant opposition himself. To see it more clearly, let us see what happens if Black makes a mistake with 2...♔e6? 3.♔e2!! Taking the distant opposition! This is actually the same as the ♔e6-♔e4 position. White makes progress according to how Black reacts. 3...♔d6 (On 3...♔f6 4.♔d3! White goes from this direction. 4...♔e5 5.♔e3+- we already know this position from the 1...♔e5 line.) 4.♔f3! ♔e7 and now 5.♔e3!!+- White uses again the distant opposition and wins by using the already known technique.

3.♔e3

On 3.♔e2 ♔e6!

3...♔e7!

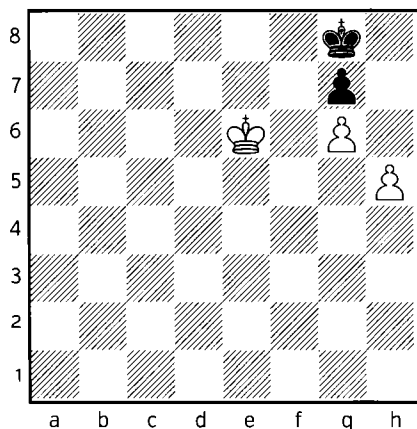
Sorry for saying it a hundred times, but I just want to show the importance of the opposition in pawn endgames.

4.♔d3 ♔d7 5.♔c4 ♔e6 6.♔d4 ♔d6=

We have reached the position from the line 2.♔e4. White cannot make progress.

4

THEORETICAL POSITION



Compared to the previous example, all the pawns are one rank further up and White has already passed the 6th rank with his king, which was the criteria for the win. However this current position is a very important theoretical draw to remember. The reason is the squeezed situation of the black king into the corner, something White cannot break because of the stalemate!

1. ♖e7 ♜h8 2. h6!?

A tricky attempt to avoid the stalemate, but it is useless in case of Black's correct reaction. 2. ♖f7 is stalemate.

2... ♜g8!

A cold-blooded move — Black already wants to take on h6. But not 2...

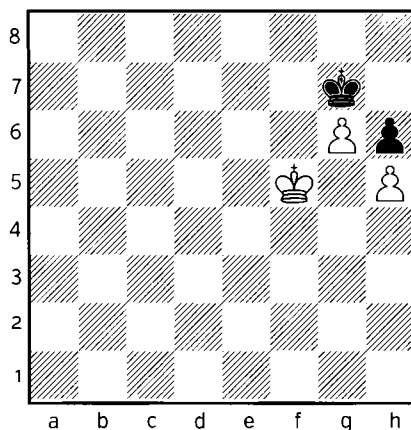
gxf6? 3. ♖f7 and there is no stalemate anymore.

3. h7+ ♜h8

Whatever White moves, Black is stalemated.

5

THEORETICAL POSITION



Here is another famous theoretical draw! Everything seems to be justified for the win, but just as in the previous example Black survives by stalemate.

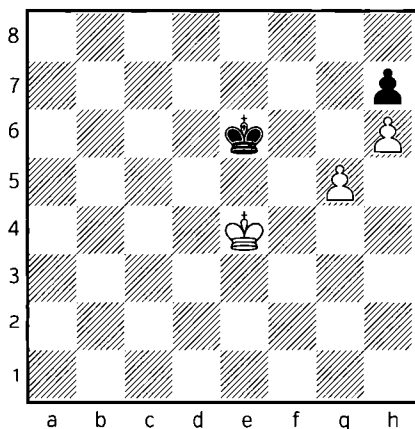
1. ♖e6 ♜g8

Actually other moves are also draws: e.g. 1... ♖f8 2. ♖f6 ♜g8 3. g7 ♜h7 and White either loses his pawn or gives stalemate with 4. ♖f7=

2. ♖f6 ♜f8 3. g7+ ♜g8 4. ♖g6=

6

THEORETICAL POSITION



Black could secure the draw if he had time to run into the corner with the king, but White has a pretty breakthrough.

1.g6!

In endgames, we must always keep in mind the possibility of the breakthrough.

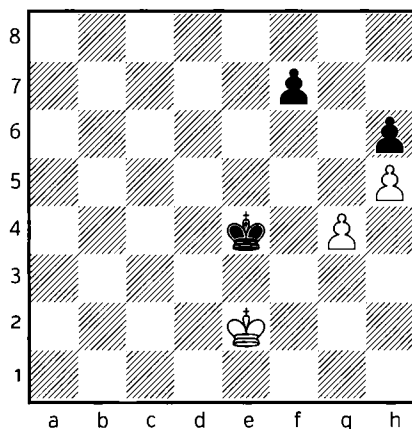
1...hxg6

1...♔f6 2.gxh7+-

2.h7+-

7

THEORETICAL POSITION

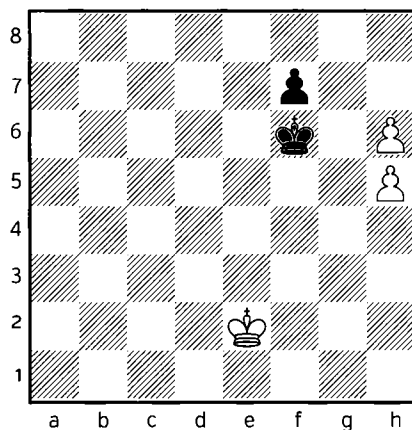


Black seems to win as he collects the pawns with ♔f4 next move, however the breakthrough makes a full turn of the result.

1.g5! ♔f5

1...hxg5 2.h6+-

2.gxh6 ♔f6

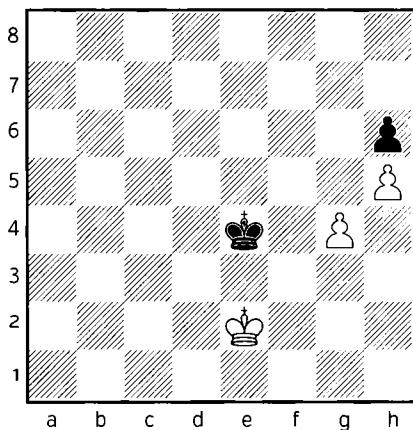


As we already know, White can have as many h-pawns as he wants if the black king is in the corner. However, here the f7 pawn not only blocks its way, but also places him into zugzwang. After any move the king must move from f6 and h7 wins.

3. ♖f3 ♔g5 4. h7+–

8

THEORETICAL POSITION



What is the situation here, without the f7 pawn?

1.g5

White executes the usual breakthrough.

1... ♖f5! 2.g6

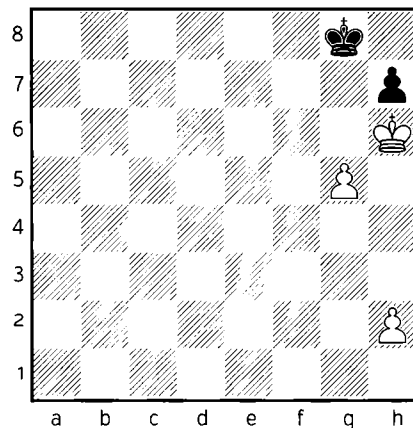
2.gxh6 ♖f6 is already a draw without the f7 pawn 3. ♖f3 ♖f7=

2... ♖f6=

and we have reached another example that we discussed earlier this chapter. White cannot win after ♖g7 because of the stalemate tricks.

9

THEORETICAL POSITION



In the next few examples we examine the topic wherein the stronger side has h- and g-pawns against the weaker side's h-pawn. This is rather concrete and the win or draw is usually dependent on very small nuances. The winning technique is the following: White must calculate precisely when to push h5-g6. After hxg6 hxg6, the black king must stay on h8, so after ♖g8 g7 wins. The solution is

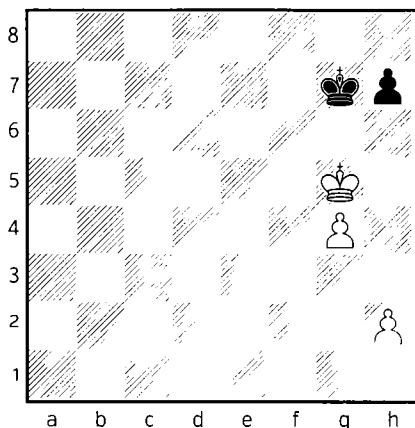
1.h3!

Other moves are not winning.

1...♔h8 2.h4 ♕g8 3.h5 ♔h8 4.g6
hxg6 5.hxg6 ♕g8 6.g7+-

10

THEORETICAL POSITION



The situation is much more complex if the white king has not reached the h6 square. I would say this is a more common case in practical games, so we should analyse it in detail. This position is actually a mutual zugzwang. If it is White's move, the position is drawn, while if it is Black to move, then White is winning. The point is White has to lose a decisive tempo if he wants to make progress. Let's see the details.

1.h3

In case of 1.h4 Black must allow the king to move to h6, but he must calculate, that after ♔h6-g5-h5-g6 he should be able to play ♔h8 at the

end. Therefore the right move is 1...♕f7! 2.♔h6 ♕g8 3.g5 ♔h8 4.h5 ♕g8 5.g6 hxg6 6.hxg6 ♔h8=

1.♔h5 with the idea, that if the king moves, then ♔h6 and White can calculate if h3 or h4 will be the winning line. However with the king on h5, Black must play 1...h6!= followed by ♔h7-g7. White cannot make progress, because after the h4-g5 break, his king has not reached the 6th rank.

1...♕g8!

The only move, which we can only find after calculating the position arises after ♔h6 and the usual pawn advance. With the king on g5 1...h6+ loses in view of 2.♕f5! ♕f7 3.h4! and the king enters into Black's camp, where the ...h6 move turns out to be a critical weakening. 3...♕g7 4.♕e6 ♕g6 5.♕e7 ♔g7 6.h5+- followed by ♕f6 and collecting the h6 pawn.

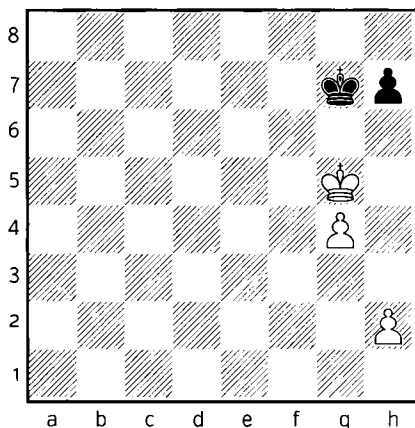
2.♔h6

With the pawn on h7 2.♕f6 does not yield anything. Black just waits with 2...♕f8 3.h4 ♕g8 4.g5 ♕f8 5.h5 ♕g8 and the game is drawn. For instance after 6.♕e7 Black can even force a draw by 6...h6 7.g6 ♔g7= and we have reached a previously analysed position.

2...♔h8 3.g5 ♕g8 4.h4 ♔h8 5.h5 ♕g8 6.g6 hxg6 7.hxg6 ♔h8=

11

THEORETICAL POSITION



Knowing the previous example, it is already clear what happens if it is Black to move.

1...♔f7

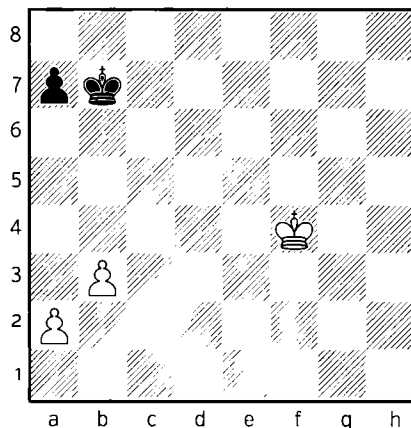
other king moves are losing, because White can calculate if he needs to play h3 or h4 to win the critical tempo... 1... h6+ loses too because of 2.♔f5! ♔f7 3.h4 ♔g7 4.♔e6 ♔g6 5.♔e7 ♔g7 6.h5+-

2.♔h6 ♔g8 3.g5 ♔h8 4.h4 ♔g8 5.h5 ♔h8 6.g6 hxg6 7.hxg6 ♔g8 8.g7+-

If in the initial position the g4 pawn is back on g3 or g2, the game is won for White regardless who is to move, as he has enough spare tempi in reserve.

12

▷ R. RAPPORT
▷ A. KHALIFMAN
AEROFLOT OPEN, 2015



It is very exciting to see how the Ex-World Champion Alexander Khalifman demonstrates perfect knowledge of the position and holds the draw by pure understanding of this type of pawn endgame. Having studied the previous examples, we can also solve such difficult problems over the board.

51.♔e5 ♔c6!

It is very important to go forward with the king, provoking the a2-a3 move to win a crucial tempo — one which White needs to execute the winning technique we have studied in the previous examples.

52.♔d4 ♔b5 53.a3

53. ♖c3 ♖c5 forces one of the pawns to move if White wants to make progress.

53... ♖b6!

Black starts waiting now. He only moves with his a-pawn if it forces a draw. Let's say after 55.b4 a5. Otherwise it is obligatory to keep it on a7 to save the game.

54. ♖d5

White cannot make progress if he tries direct opposition. 54. ♖c4 ♖c6 55. ♖b4 ♖b6=

54... ♖b5 55. ♖d6 ♖b6 56.a4 ♖b7 57. ♖d7

White tries with the side opposition. 57. ♖c5 is another line where we can see the importance of provoking all the white pawn moves... 57... ♖c7 58. ♖b5 ♖b7 We have reached the position, that we have already studied before... 59.b4 (If 59. ♖a5 ♖b8! 60. ♖a6 ♖a8 61.b4 ♖b8 62.b5 ♖a8 63.a5 ♖b8 64.b6 axb6 65.axb6 ♖a8= and draw!) 59... ♖a8! By accurate calculation we come to the right conclusion! (59... ♖c7 is also good. It transposes after ♖a6 ♖b8.) 60. ♖a6 ♖b8 61.b5 ♖a8 62.a5 ♖b8 63.b6 axb6 64.axb6 ♖a8!= and Black holds!

57... ♖b8!

The only move! Black must prevent the white king from getting behind

his pawn! 57... ♖b6? loses to 58. ♖c8! a5 (58... ♖c6 59. ♖b8 ♖b6 60.b4+-) 59. ♖b8 ♖c5 60. ♖b7 ♖b4 61. ♖b6 ♖xb3 62. ♖xa5 ♖c4 63. ♖b6+-

58. ♖c6

On 58. ♖d8 Black only waits with ♖b7-b8. 58... ♖b7

58... ♖c8 59. ♖c5 ♖c7 60. ♖b5 ♖b7 61. ♖a5 ♖b8!

We already know that Black must calculate if the king should go to a8 or b8. With the white pawn on a3, 62... ♖a8 would have been the drawing move!

62. ♖b4

62. ♖a6 ♖a8 63.b4 is the usual draw after 63... ♖b8 64.b5 ♖a8 65.a5 ♖b8 66.b6 axb6 67.axb6 ♖a8 68.b7+ ♖b8 69. ♖b6=

62... ♖c8 63. ♖c5 ♖c7 64.b4 ♖b7 65. ♖d6 ♖b6 66. ♖d7 ♖b7 67.a5 ♖b8 68. ♖c6 ♖c8 69.b5 ♖b8 70.b6 axb6 71.axb6 ♖c8 72.b7+ ♖b8 73. ♖b6

An excellent practical demonstration of how useful it could be to study such endgames.

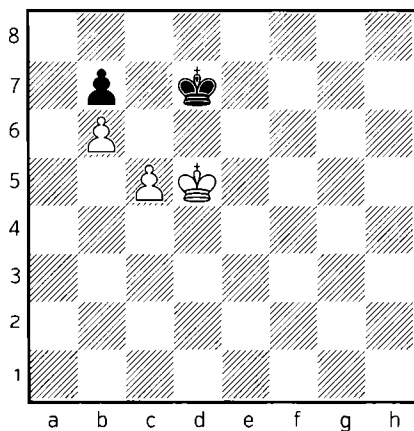
1/2

3.2. BLOCKADED PAWNS/TRIANGULATION

In this chapter we get familiar with another key motif in pawn endgames — one known as triangulation. Triangulation should be used, when we realize, that if it was our opponent's turn, he would find himself in zugzwang. Triangulation is a manoeuvre which is based to on giving give the right of moving to the opponent.

1

THEORETICAL POSITION

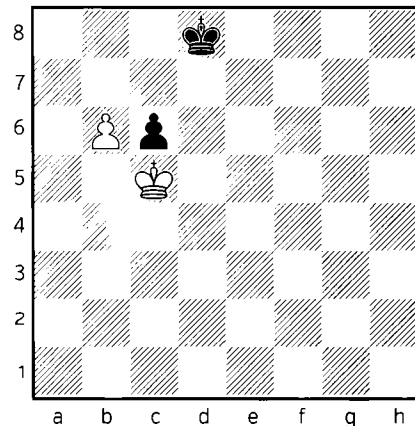


White is winning, but if he wants to win with style he might fall into a hidden trap. The winning method is to give the move to Black by using a triangulation. Triangulation is a common motif

in pawn endgames and we should always keep it as an option in mind.

1. ♔e5!

White can actually reach the same with 1. ♔d4! as well. However the pretty 1.c6+? spoils the win because of 1... ♙c8! (If 1... bxc6+? White strategy would have reached it's goal 2. ♔c5 ♔d8



A clever attempt by Black to play ♙c8 only when White takes on c6 and hold the draw by opposition. However, White has stronger alternative. 3. ♔d6! Threatening with b7 and only after 3... ♙c8 4. ♔xc6! ♙b8 5. b7+-) 2. ♔d6 ♙b8! Using the fact, that after c7 ♙c8, White cannot make progress, while after any other moves, Black takes on c6 followed by ♙c8 taking the opposition and holding the draw. 3. ♔d7 bxc6 4. ♔xc6 ♙c8=

1... ♙c6

Black cannot hold the opposition with $1... \text{♞e7}$ because of the break through $2.\text{c6!+-}$

$2.\text{♞d4 ♞d7 } 3.\text{♞d5!}$

We have reached our initial position, just with Black on move. He must allow the king to the 6th rank as ♞e7 is met by c6 .

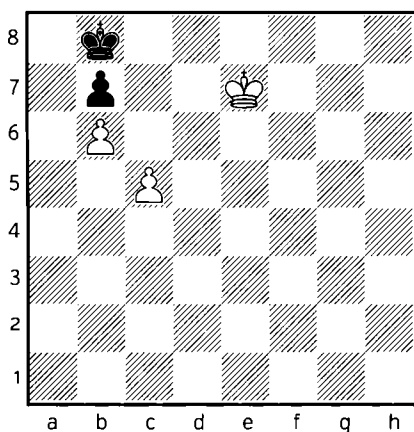
$3...\text{♞c8 } 4.\text{♞d6 ♞d8}$

White still needs to work a bit as c6 is met by ♞c8!

$5.\text{♞e6 ♞c8}$

$5...\text{♞e8 } 6.\text{c6+-}$

$6.\text{♞e7 ♞b8}$



Black tries to get stalemated again by moving to the corner. We have already seen, that with a5-b6 pawns against b7 , this works, but now...

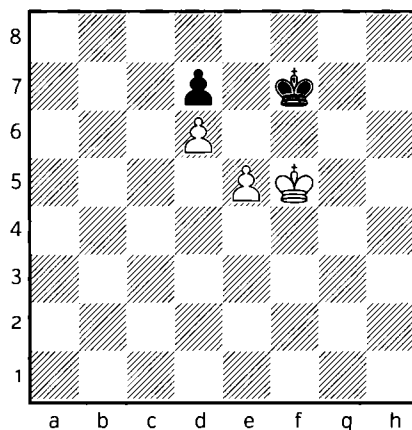
$7.\text{♞d7 ♞a8 } 8.\text{c6!}$

and Black cannot play ♞b8 as he does with the a6 pawn.

$8...\text{bxc6 } 9.\text{♞c7+-}$

2

THEORETICAL POSITION



The same position, just we moved two lines to the right. White wins with the same triangulation motif, but now the pretty

$1.\text{e6+!}$

is also winning. Now on $1.\text{♞g5!}$ also does the job.

$1...\text{♞e8}$

$1...\text{dxe6+ } 2.\text{♞e5 ♞f8}$ And now: $3.\text{♞f6! } \text{♞e8 } 4.\text{♞xe6 ♞d8 } 5.\text{d7+-}$

$2.\text{e7+-}$

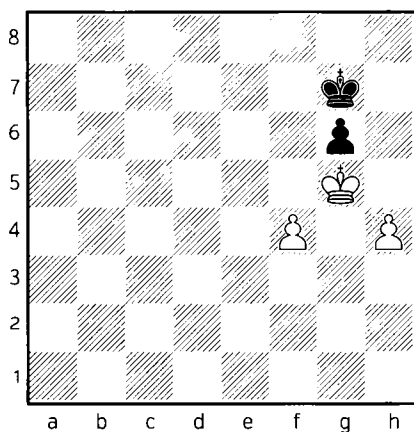
and the king can go around towards the d7 pawn.

3.3. H+F PAWNS VS. G-, H- OR F- PAWN

Just as the 3.1 chapter, this is another very common topic with big practical importance. There are many theoretical positions, which would be extremely difficult to calculate over the board, but as more positions we know as easier is our task during the practical game.

1

THEORETICAL POSITION



Let's get familiar with another type 2 vs 1 endgame. The chance of having it in a practical game is quite low, but as more ideas we know as easier we will

solve problems in our own games. Black holds by playing

1...♔f7!

But not 1...♔h7 after which 2.h5! gxh5
3.♔xh5+-

2.♔h6

White can win the opposition here as well, but it does not matter as the h-pawn remains on board. 2.f5 gxf5
3.♔xf5=

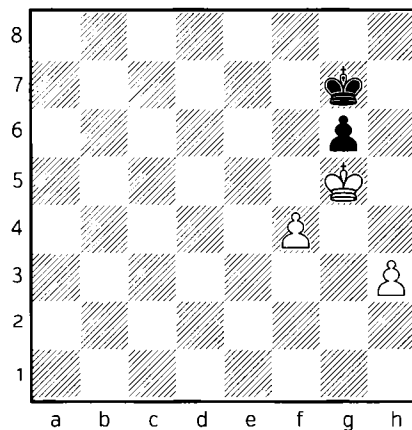
2...♔f6 3.♔h7

Black cannot get behind the pawn because of

3...♔f7! 4.♔h8 ♔f8! =

2

THEORETICAL POSITION



Let's move back the pawn to h3. The situation is already different because of the spared h3-h4 tempo, which can be used in a good moment. This example teaches us the technique of getting behind the pawn, which is another very useful and common idea, can happen any time in our games, so it is better to master it.

1...♔f7

1...♔h7 loses to the same technique, just from the other side 2.♔f6! ♔h6 3.h4 ♔h7 4.♔f7 ♔h6 5.♔g8! This is the key! 5...♔h5 6.♔g7 ♔xh4 7.♔xg6+-

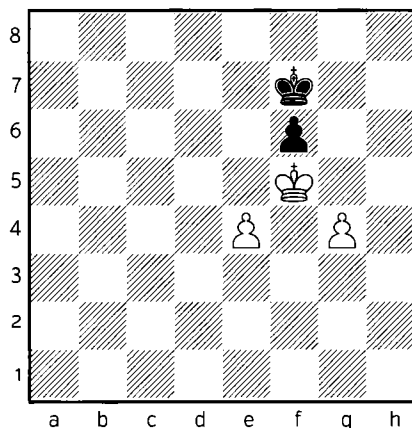
2.♔h6 ♔f6 3.h4 ♔f7 4.♔h7

Black is in zugzwang, he cannot hold the white king to get behind the pawn.

4...♔f6 5.♔g8! ♔f5 6.♔g7 ♔xf4 7.♔xg6+-

3

THEORETICAL POSITION



If we move all pieces one side to the left, the game is already won. The reason is simple, White takes the opposition in any case with e5 or g5 and there will be no h-pawn remain on the board.

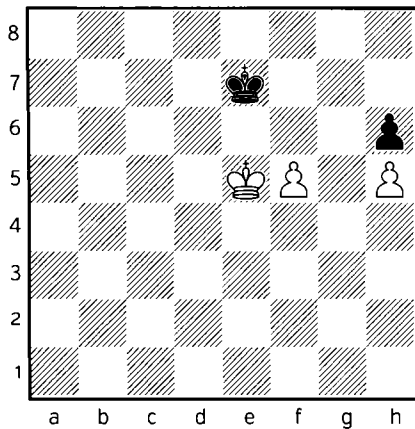
1...♔e7

1...♔g7 2.g5! fxg5 3.♔xg5+-

2.e5! fxe5 3.♔xe5+-

4

THEORETICAL POSITION



The next example is another very useful one to remember. It is important to draw your attention, that now the pawn is on h6 and like this White is always winning just he must know the technique. The situation is much more tricky with the pawn on h7, but let's not go that forward.

1. f6+ ♔f8

This is the critical position. White to move and how to win? We can quickly realize the problem, if we go ♔f5 Black plays ♔f7 and we cannot break in, while after ♔e6, ♔e8 and we must retreat again as f7-♔f8-♔f6 is stalemate. The two most natural moves are not bringing the victory for White. He should again use the method of triangulation to give the move to Black! If it was Black's turn, ♔f7 would lose to ♔f5, while ♔e8

to ♔e6 followed by f7 and the pawn promotes. Therefore, White should make the triangulation on the f4-e4-e5 squares in order to keep the option of playing ♔f5 if Black goes ♔f7.

2. ♔f4 ♔e8 3. ♔e4 ♔f8 4. ♔e5

and the game is over.

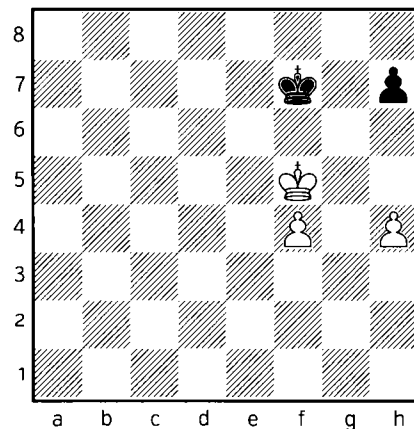
4... ♔e8

4... ♔f7 5. ♔f5+-

5. ♔e6 ♔f8 6. f7 ♔g7 7. ♔e7+-

5

THEORETICAL POSITION



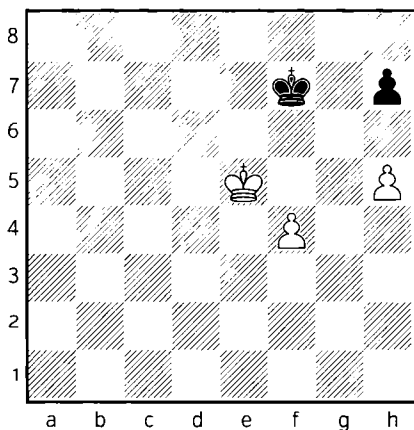
Here we are with the very tricky h7 pawn. The truth is if it is White to move, he is winning, while if it Black's turn the position is drawn. I have seen many examples where even strong grandmasters failed.

For instance, imagine if Black had his king on f8 and he had a choice to play ♖e7 or ♖f7. ♖e7 draws and ♖f7 loses. Another example, let's put back the pawn to h2. If white plays h4, the game is drawn and with h3 he is winning. Let's take a closer look to understand the reasons. First with the case if it is White to move. The winning requires very difficult technique.

1. ♖e5 ♖e7 2. h5!

The only winning plan.

2... ♖f7



2...h6 We already know from the previous example how Black is losing if he moves his pawn to h6. f5-f6 followed by the triangulation.

3. ♖d6!!

Not an easy move to find without knowing the position, but this is the only way to the victory.

3... ♖f6 4. h6! ♖f7

4... ♖g6 is not an option obviously
5. ♖e6 ♖xh6 6. f5+-;

4... ♖f5 5. ♖e7 ♖xf4 6. ♖f6! Shouldering! (Not 6. ♖f7? ♖e5 7. ♖g7 ♖e6 8. ♖xh7 ♖f7=) 6... ♖e4 7. ♖g7 ♖f5 8. ♖xh7 ♖f6 9. ♖g8+-

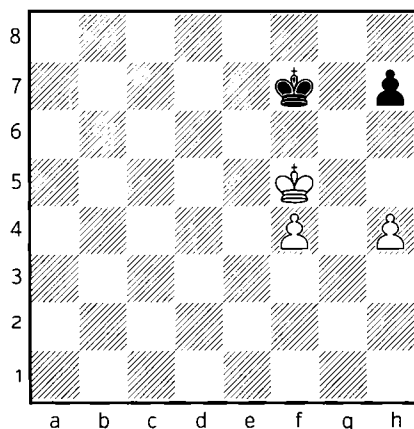
5. ♖d7 ♖f6 6. ♖e8!

and White gets behind the pawn.

6... ♖g6 7. ♖e7 ♖xh6 8. f5+-

6

THEORETICAL POSITION



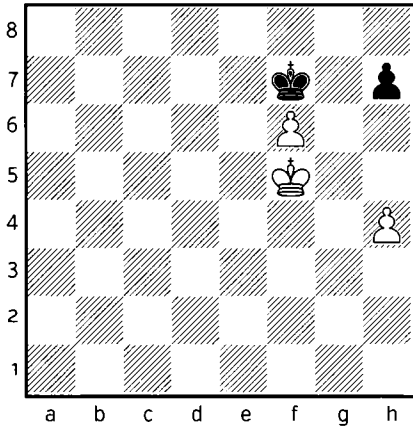
Now let's see why White does not win if it is Black to move.

1... ♖e7! 2. ♖e5

Moving to h6 does not win either
 2. ♖g5 ♜f7 3. ♜h6 ♜g8 4. f5 ♜h8 5. f6
 ♜g8 6. h5 ♜h8 and White cannot
 make progress because of the stale-
 mate.

2... ♜f7 3. h5

The main attempt should be the one,
 that White employed in the previous
 example. 3. f5 ♜e7 4. f6+ ♜f7 5. ♜f5



5... ♜f8 with the pawn on h7, the tri-
 angulation does not bring anything,
 because Black can always move to f7
 with his king, without being afraid
 of ♜f5 and ♜g6... 6. ♜e6 ♜e8 Black
 is actually very lucky, but another
 stalemate trick saves him... 7. f7+ ♜f8
 8. ♜f6 (On 8. h5 h6=) 8... h6! 9. ♜g6
 h5! = with a draw!

3... ♜e7 4. h6 ♜f7 5. ♜d6

White tries the same method, but
 now he fails to get behind the pawn
 with ♜d7-e8 because of

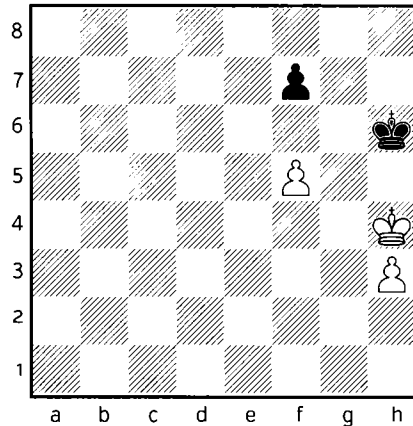
5... ♜f6 6. ♜d7 ♜f7! 7. f5

7. ♜d8 ♜f8! =

7... ♜f6 8. ♜e8 ♜xf5 9. ♜f7 ♜e5!
 10. ♜g7 ♜e6 11. ♜xh7 ♜f7 =

7

▷ R. KHAETSKY
 ▶ M. KRAVTSIV
 UKRAINE, 2007



A very nice practical game in which
 White perfectly uses the motifs of tri-
 angulation and avoiding mutual zug-
 zwang.

50. ♜g4 f6

50... ♜g7 loses much easier after
 51. ♜f4 f6 52. ♜e4 ♜h6 53. ♜d5 ♜g5
 54. ♜e6+-

51. ♜h4!

Wrong was 51. h4? ♜g7 52. ♜f4 ♜h6
 53. ♜e4 ♜h5 54. ♜d5 ♜xh4 White

should play ♔e7-g5 and only then ♔e6 , but he fails by one tempo. He can still save the draw by turning back with the king. 55. ♔e4 (55. ♔d6? loses to 55... ♔g4! 56. ♔e6 ♔g5-+) 55... ♔g4 56. ♔e3 ♔xf5 57. ♔f3=

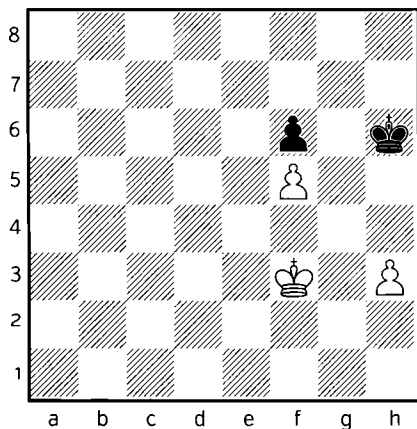
51... ♔g7 52. ♔g3!

White cannot breakthrough on the kingside, he must go around with his king towards the f6 pawn.

52... ♔h6 53. ♔g4!

Winning another important tempo by forcing the black king to retreat!

53... ♔g7 54. ♔f3 ♔h6



55. ♔e3!

White correctly realizes, that the position with the kings on g5 and e4 is a mutual zugzwang, therefore he correctly goes around the e4 square. 55. ♔e4? ♔g5=

55... ♔h5 56. ♔d4! ♔g5 57. ♔e4

♔d5 is coming next. Black resigned!

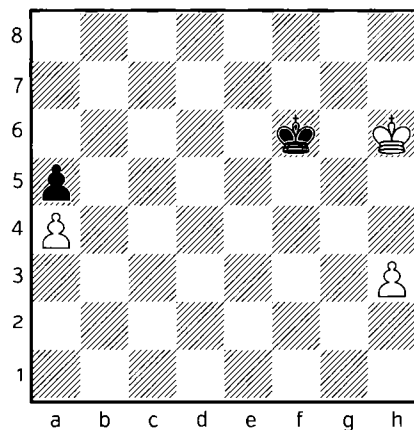
1-0

3.4. H+A PAWNS VS A-PAWN

This is another common type of endgame, which deserves to have an own chapter. We have already discovered, that the h-pawn makes many exceptions. The reason is, the opposition does not matter here, the only question is if the king of the weaker side gets back to the corner in time or not.

1

THEORETICAL POSITION



In the following couple of examples we get familiar with a common type of 2 vs 1 endgames, where both sides have an a-pawn and the stronger side has an extra pawn on the other side of the board. The most common case is somehow when the extra pawn on the h-file, therefore we focus mainly on this. We already know, that the h-pawn itself cannot win, therefore only winning plan is to sacrifice it and run with the king towards the other pawn. There are two very important things we have to check: — The position of the extra h-pawn. As less advanced as better chance the stronger side has. The explanation is easy, Black has to lose much more tempi to go towards h2, than let's to to h5. — The situation of the a-pawns. As far they are advanced as better chance the stronger side has. The explanation is easy again, if White takes the pawn on a3, Black has more chance to reach the corner with his king, while having taken it on a6 when White needs to play ♖b7 and promotes the pawn. So, for White the best is to have the pawn on a6-h2 against the a7 (actually, if the pawn can be taken on a6 it is already winning, as White plays ♖b7 next, blocks the way of the black king to the corner), and for Black the best is to have his pawn on a3 against a2 and h7. Let us examine some concrete examples:

1.h4

White has to waste one tempo to escape his king.

1...♙f5!

But not 1...♙f7? because the route towards the h-pawn is much longer now. 2.♙g5 ♙g7 3.♙f5 ♙h6 4.♙e5 ♙h5 5.♙d5 ♙xh4 6.♙c5 ♙g5 7.♙b5 ♙f6 8.♙xa5 ♙e7 9.♙b6 ♙d7 Black actually just fails by one tempo. ♙c8 would have been a draw, but White plays 10.♙b7!+-

2.♙h5!

This is the critical try, we should remember on this motif. White wins a tempo as ♙f4 loses to ♙g6, but in this case it does not help. 2.h5 ♙f6=;

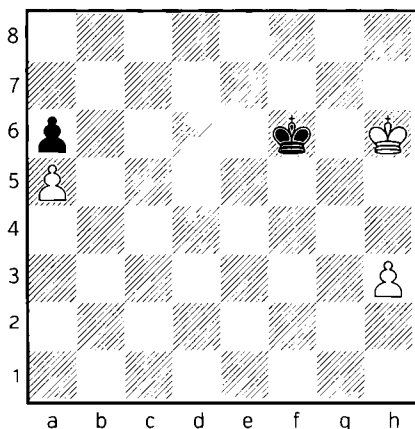
2.♙g7 ♙g4 3.♙f6 ♙xh4 4.♙e5 ♙g5 5.♙d5 ♙f6 6.♙c5 ♙e6 7.♙b5 ♙d6 8.♙xa5 ♙c7=

2...♙f6 3.♙g4 ♙g6 4.♙f4 ♙h5 5.♙e5 ♙xh4 6.♙d5 ♙g5 7.♙c5 ♙f6 8.♙b5 ♙e6 9.♙xa5 ♙d7! 10.♙b6 ♙c8!=

Just in time!

2

THEORETICAL POSITION



Let's put the a-pawns one rank forward. White is winning now by using the same technique.

1.h4! ♖f5 2.♖h5!

White wins the critical tempo with this subtle retreat! But not the direct
 2.♖g7? ♖g4 3.♖f6 ♖xh4 4.♖e6 ♖g5
 5.♖d6 ♖f6 6.♖c6 ♖e6 7.♖b6 ♖d6
 8.♖xa6 ♖c6=

2...♖f6

2...♖f4 3.♖g6+-

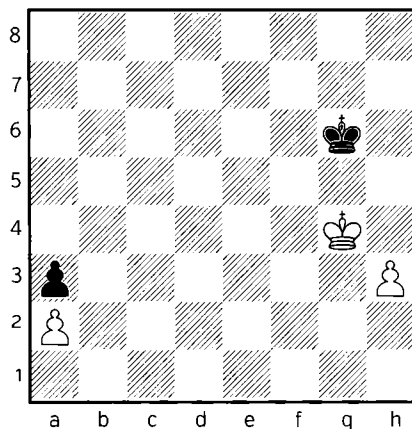
**3.♖g4 ♖g6 4.♖f4 ♖h5 5.♖e5 ♖xh4
 6.♖d5 ♖g5 7.♖c5 ♖f5 8.♖b6 ♖e6
 9.♖xa6 ♖d7**

Thanks to the fact, that the pawns were on a5-a6, Black just misses to get into the corner.

10.♖b7+-

3

THEORETICAL POSITION

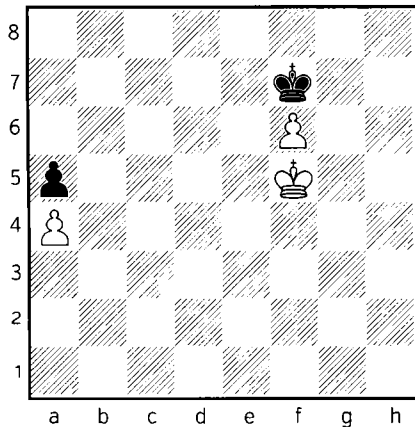


Black has reached the perfect situation of the a-pawns and despite the ideal situation of the h-pawn he can hold the draw.

**1.♖f4 ♖h5 2.♖e4 ♖h4 3.♖d4 ♖xh3
 4.♖c4 ♖g4 5.♖b4 ♖f5 6.♖xa3 ♖e6
 7.♖b4 ♖d7 8.♖c5 ♖c8 9.♖b6 ♖b8=**

4

THEORETICAL POSITION



The same type of endgame might arise with a pawn on another file. The story is the same again. The outcome depends on after taking on a5 if the black king gets back to the corner or not.

1. ♖e5 ♜f8 2. ♜d5

2. ♜e6 does not bring anything 2... ♜e8 3. f7+ ♜f8 4. ♜f6=

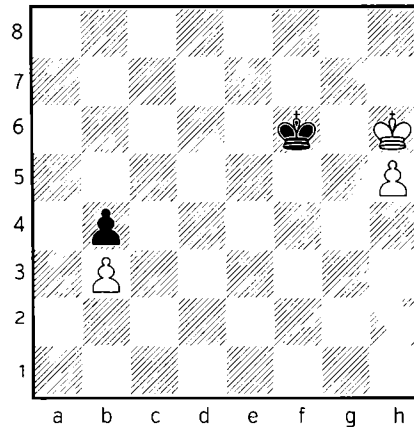
2... ♜f7 3. ♜c5 ♜xf6 4. ♜b5 ♜e6
5. ♜xa5 ♜d7

Again, if the pawn was taken on a6, then ♜b7 wins, but now Black holds with

6. ♜b6 ♜c8=

5

THEORETICAL POSITION



Of course, if the pair of pawns are not on the a-file, the outcome is out of question. White always wins as it does not matter if Black gets back to the corner or not. He only needs to rescue his king, which can be done by

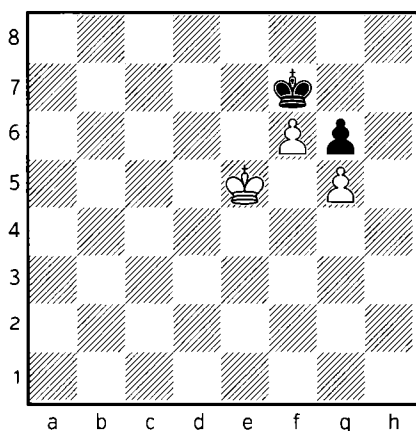
1. ♜h7 ♜f7 2. h6! ♜f8 3. ♜g6 ♜g8
4. ♜f6 ♜h7 5. ♜e5 ♜xh6 6. ♜d5 ♜g5
7. ♜c5 ♜f6 8. ♜xb4+-

3.5. PROTECTED PASSED PAWN

Passed pawns, especially protected passed pawns have a special value in pawn endgames as they pin the opponent's king to the square of the passed pawn, meanwhile the other king can collect the pawns on the other side of the board. In this chapter we examine some theoretical positions with limited number of pawns. The winning motif of the first one has huge practical importance, try to keep it in mind.

1

THEORETICAL POSITION



We have already seen, that the position with h5-g6 pawns against h6 is a theoretical draw. Let's see what happens if we move everything a line to the left. The key is again, that there are no h-pawns on the board. White wins by

using the motifs that we have already discussed in the previous chapters.

1. ♔d6 ♕f8 2.f7!

Very instructive sacrifice to transpose into a winning position. 2. ♕e6 ♕e8 3.f7+ ♕f8 is actually also winning, just White should give up his f-pawn. 4. ♔d6 ♕xf7 5. ♔d7 the same as the main line.

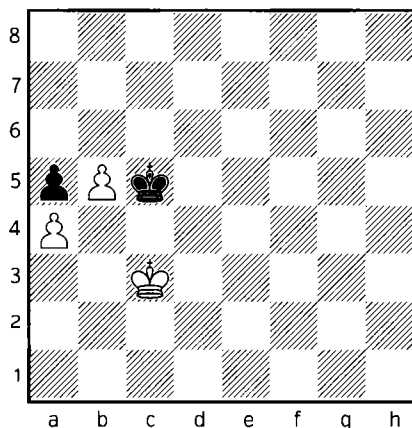
2... ♕xf7 3. ♔d7 ♕f8 4. ♕e6 ♕g7 5. ♕e7 ♕g8 6. ♕f6 ♕h7 7. ♕f7+-

White wins the g-pawn and his king is standing on the 6th rank.

7... ♕h8 8. ♕xg6 ♕g8 9. ♕h6! ♕h8 10.g6 ♕g8 11.g7

2

THEORETICAL POSITION



Protected passed pawns are big triumphs in all the endgames, especially in pawn endgames. Black tries to block the king's route to invade, but he cannot follow him to far with opposition because he must stay in the square of the b-pawn.

1. ♖d3 ♖d5 2. ♗e3 ♗e5 3. ♗f3

Black cannot follow anymore with ♗f5 because the pawn promotes.

3... ♗d5 4. ♗f4 ♗d6 5. ♗e4

The first step is done. White invades, but there is one more trap to avoid...

5... ♗e6 6. ♗d4 ♗d6 7. ♗c4 ♗c7
8. ♗d5!

White has to realize the stalemate idea, that Black is playing for and then he can easily find the way to avoid it and to win the game. On 8. ♗c5 ♗b7 White cannot play 9. b6?? ♗a6 and ♗c6 is stalemate.

8... ♗b6

8... ♗d7 9. b6+-

9. ♗d6 ♗b7 10. ♗c5

We have already seen, that if it is White to move he cannot play b6, but now it is Black's turn and he is zugzwang.

10... ♗a7

10... ♗c7 11. b6+ ♗b7 12. ♗b5+-

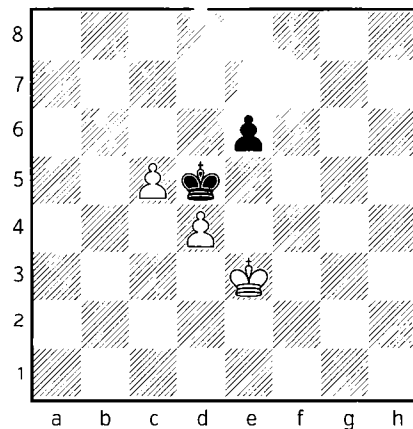
11. ♗c6+-

3.6. UNDERMINING

Undermining is a very important resource of the defensive side. This is actually the only way to get rid of a protected passed pawn, therefore neither side should forget about this option.

1

THEORETICAL POSITION



A protected passed pawn can be eliminated by undermining the backward defender. This is a very important motif to remember, that can be used by the defensive side in many complex endgames.

1... e5! 2. dxe5 ♗xe5=

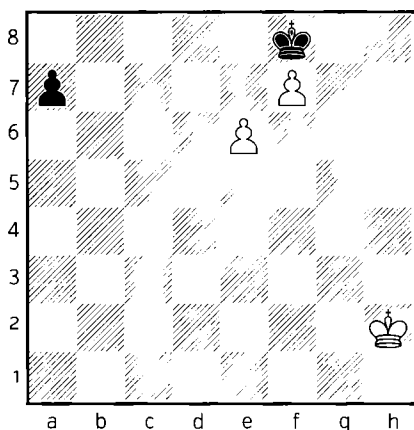
followed by collecting the c-pawn.

3.7. CONNECTED PASSED PAWNS

What can be better than a passed pawn? Two passed pawns. :) In this chapter we get familiar with some special abilities of the connected passed pawns.

1

THEORETICAL POSITION



White is not in the square of the a-pawn, but connected passed pawns can sometimes be used for mating ideas. We should keep it as well in mind, it occurs time to time in practical games. White wins after

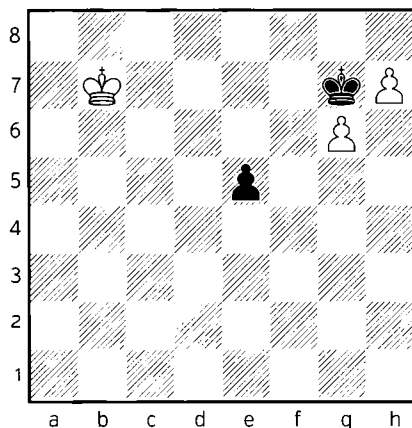
1. ♖g3 a5 2. ♖f4 a4 3. ♖e5! a3

Black is just about to promote with check, but White comes first with 3... ♖e7 4. ♖d4+- and the pawn is caught.

4. ♖f6 a2 5. e7#

2

THEORETICAL POSITION



It looks like the connected pawns are blockaded, while the e-pawn cannot be stopped. The second part of the sentence is true, but White also has a triumph in his hands, which has practical importance.

1. ♖c6 e4 2. ♖d5 e3 3. ♖e6 e2

And now:

4. h8♚+! ♖xh8 5. ♖f7 e1♚ 6. g7+ ♖h7 7. g8♚+ ♖h6 8. ♚g6#

Another motif, that is useful to remember. If a pawn promote with the help of the king, we should continue our calculation because mate can be followed.

3.8. CAPTURE IN THE RIGHT MOMENT

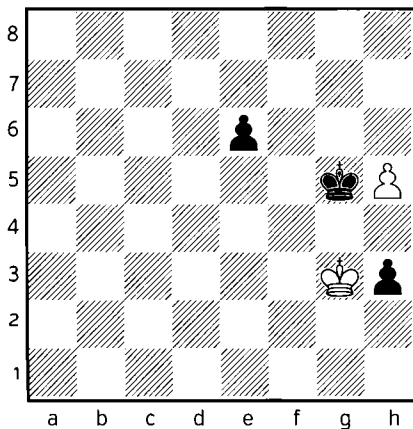
One of the most difficult thing in chess is to discover an alternative option to an automatic recapture. We all like taking the opponent's pieces, especially if he just taken our, but sometimes an intermediate move stands for our disposal with the idea to delay the capture for a better moment at favorable circumstances.

1

▷ P. SANTOS (2335)

▶ B. LALIC (2491)

CAPPELLE LA GRANDE, 2011



A very nice example, that sometimes we must resist to the capture and wait for a better moment.

1. ♖h2!!

1. ♖xh3 ♖xh5 Black wins by opposition. 2. ♖g3 ♖g5 3. ♖f3 ♖f5 4. ♖e3 ♖e5-+

1... ♖h6

After 1...e5 White can already take

2. ♖xh3 ♖xh5 3. ♖g3 ♖g5 4. ♖f3 ♖f5 5. ♖e3=

2. ♖g3! ♖xh5

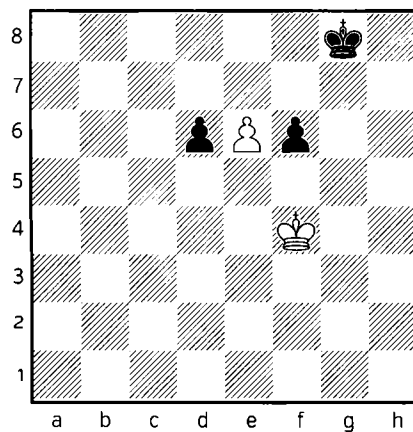
2...h2 does not change anything 3. ♖xh2 ♖xh5 4. ♖h3!= Keeping the same opposition.

3. ♖xh3 ♖g5 4. ♖g3 ♖f5 5. ♖f3 ♖e5 6. ♖e3= 1/2

2

R. SKUJA

1950



The next study shows a seldom example, when sometimes one must refuse

a capture in order to capture at better circumstances.

1. ♖f5 ♖g7 2.e7 ♖f7 3.e8 ♚+ ♖xe8
4. ♖e6!!

A unique mutual zugzwang. White captures next move according to Black's reaction. After 4. ♖xf6? loses to 4... ♖d7 5. ♖f5 ♖c6 6. ♖e4 ♖c5 7. ♖d3 ♖d5-+ And Black gets the opposition.

4... ♖d8

4... ♖f8 5. ♖xf6=;

4...d5 5. ♖xd5 ♖f7 6. ♖e4 ♖g6
7. ♖f4=;

4...f5 5. ♖xf5 ♖d7 6. ♖e4 ♖c6 7. ♖d4=

5. ♖xd6=

with draw.

CHAPTER 4

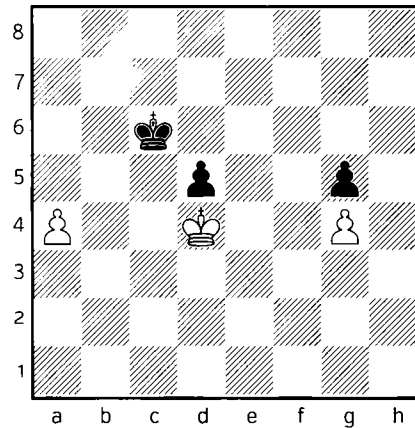
COMPLEX [4+ PAWNS] THEORETICAL POSITIONS

1

4.1. DISTANT PASSED PAWNS

Distant passed pawns have a really big value in pawn endgames, never underestimate their strength! The basic idea behind them is to deflect the opponent's king by sacrificing it, meanwhile we can use our own king to gain some benefits.

PRACTICAL POSITION

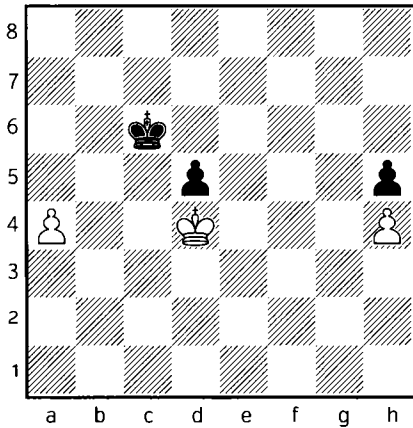


Both sides have a passed pawn and the material is balanced. However in endgames, especially in pawn endgames, the distant passed pawn has an extra value. Let us check some illustrative examples to feel its power. This is a classical example, when White can use his distant passed pawn to deflect the opponent's king to the queen-side, meanwhile he takes all the black pawns and promotes the g4.

1. a5 ♖b5 2. ♔xd5 ♖xa5 3. ♕e5 ♖b6
4. ♕f5 ♖c6 5. ♕xg5+-

2

PRACTICAL POSITION



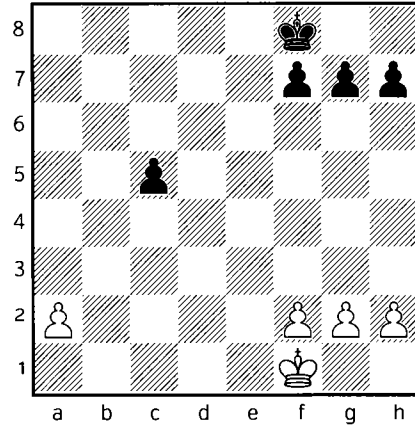
Just as in the previous chapters, we could see, that the h-pawn often makes exceptions. Despite the distant passed pawn, White cannot win because the black king gets back to the corner in time...

1. a5 ♖b5 2. ♔xd5 ♖xa5 3. ♕e5 ♖b6
4. ♕f5 ♖c7 5. ♕g5 ♖d7 6. ♕xh5 ♖e7
7. ♕g6 ♖f8=

Just in time.

3

PRACTICAL POSITION



These are the kind of positions, that we don't need to calculate, when we understand the strength of a distant passed pawn. The winning procedure includes three steps: 1) White activates his king 2) White advances his pawns on the kingside to fix the pawn structures and getting closer to the promotional squares 3) White sacrifices his distant passed pawns and collects all the black pawns with his king

1. ♕e2 ♖e7 2. ♔d3 ♖d6 3. ♕c4 ♖c6

Step one is done, the king has reached it's current maximum activity. White now fixes the kingside.

4.g4

4.h4 or 4.f4 are all serving this purpose. White can also start now with

4.a4 ♖b6 5.a5+ ♔xa5 6.♕xc5+- but in general it is better to fix the king-side first.

4...g5 5.h3 h6

It is time to sacrifice the a-pawn.

6.a4 ♖b6 7.a5+ ♔xa5

7...♕c6 does not make any difference, White gives up his pawn anyway with 8.a6 ♖b6 9.a7 ♔xa7 10.♕xc5+- and ♕d6 next.

8.♕xc5 ♖a4 9.♕d6 ♖b4 10.♕e7+-

side. White has to make an a- passed pawn with b3-a4, but he must pay attention on the details.

1.a3!

White has to create the passed pawn in „slow-motion” But not the most direct 1.b3?? because it allows the blockade with 1...b4!-+ after which Black is easily winning, he invades with his king next move.

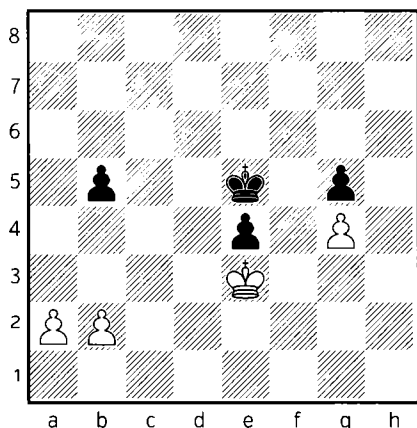
1...♔d5 2.b3! ♕e5 3.a4!

The job is done, the rest is easy.

3...bxa4 4.bxa4 ♔d5 5.a5 ♕c5 6.♕xe4 ♖b5 7.♕f5+-

4

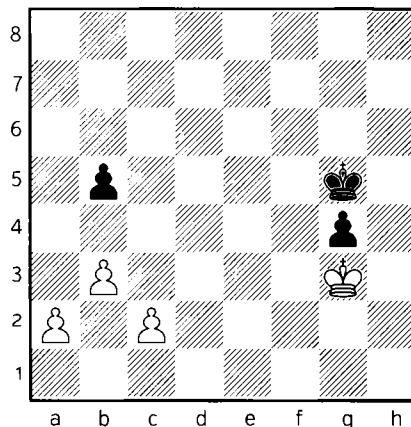
PRACTICAL POSITION



This example shows how to create a distant passed pawn. At the moment Black has one on e4, but with proper technique, White can create a more dangerous one on the queen-

5

PRACTICAL POSITION



The following example is very instructive. White has an extra pawn

and at first sight he has an easy winning position as he creates a distant passed pawn next move with a4. However the next move completely changes the evaluation.

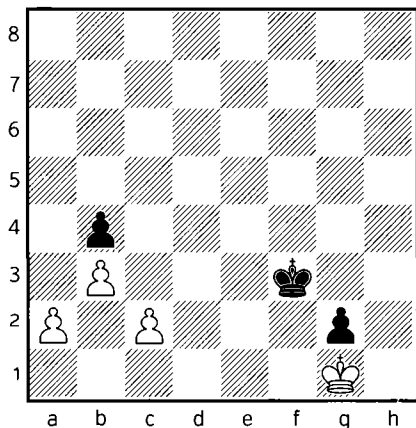
1...b4!

We must remember and keep in mind this kind of blockading ideas. Suddenly the single black pawn neutralizes completely the three white pawns and it is Black who wins by using his passed pawn.

2. ♖g2 ♖f4 3. ♖f2 g3+ 4. ♖g2 ♖g4

Black can also use the classical distant passed pawn idea, sacrifice his own passed pawn and collect all the others on the other side of the board. **4...♙e3!?** **5. ♙xg3 ♙d2 6. ♙f3 ♙xc2 7. ♙e3 ♙b2 8. ♙d3 ♙xa2 9. ♙c2 (9. ♙c4 ♙a3-+) 9...♙a3-+** and the king is on the 3rd rank, therefore he is winning.

5. ♙g1 ♙f3 6. ♙f1 g2+ 7. ♙g1



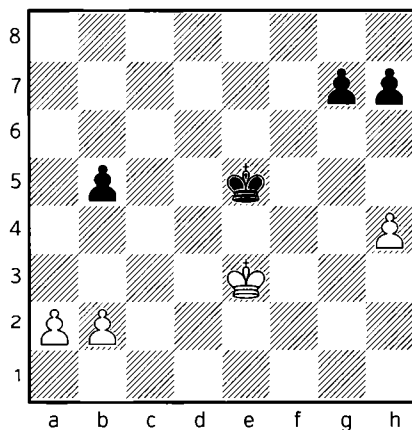
7...♙g3!

A very important motif in complex pawn endgames! Black stalemates his opponent's king, which forces one of his pawns to move...

8.c4 bxc3 9.a4 c2 10.a5 c1 ♙#

6

PRACTICAL POSITION



In the next example, both sides can create a distant passed pawn. Let us see what happens then...

1.a3!

We already know the right way to create a passed pawn. Not 1.b3? because of 1...b4

1...g6!

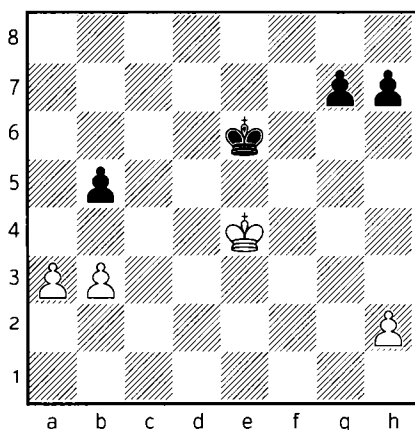
The same for Black! Not 1...h6? because of 2.h5!

2.b3 h6 3.a4 bxa4 4.bxa4 g5 5.hxg5 hxg5 6.a5 ♖d5 7.♖f3=

and the draw is inevitable.

7

PRACTICAL POSITION



Seemingly just a small difference compared to the previous example, but the facts that the White king is more active now, he is ready to make a passed pawn right away and probably the most important one, that Black is far away from creating his own passed pawn because of the placement of the h2 pawn (it takes too much time to play g5-g4-h5-h4-g3) These allow White to win with the classical distant passed pawn technique.

1.a4 bxa4 2.bxa4 g6

2...♖d6 3.♖f5 will be similar to the main line.

3.a5 ♖d6 4.♖f4!

Not the only win, but useful to pay attention on the technique, that White provokes the h6 move by threatening with ♖g5-h6 and after the weakening he get faster towards the g6 pawn.

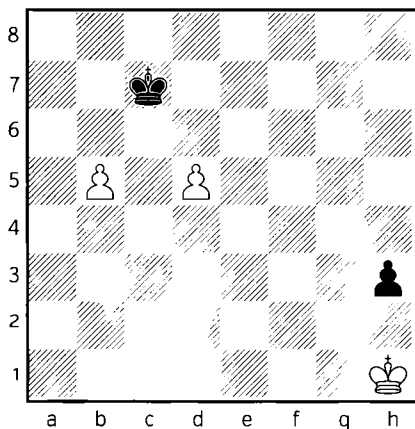
4...h6 5.a6 ♖c6 6.♖e5 ♖b6 7.♖f6 ♖xa6 8.♖xg6 ♖b6 9.♖xh6+-

4.2. CONNECTED PASSED PAWNS VS SEPARATED PASSED PAWNS

In the middlegames connected passed pawns are clearly superior to the separated passed pawns, because with proper support by the pieces they cooperate much better. However in pawn endgames, the case is more or less the opposite. The explanation is quite easy, the king stay between the connected pawns, but if the separated passed pawns are enough far advanced or enough far from each other, the king cannot fight against them. The following examples will show us the rules of the separated passed pawns.

1

THEORETICAL POSITION



An important motif, that the separated passed pawns protect each other, meanwhile White can use his king on any purposes.

1...♔d6

The same on the other side 1...♔b6
2.d6 ♔b7 3.♔h2 ♔c8 4.b6 ♔d7 5.b7+-

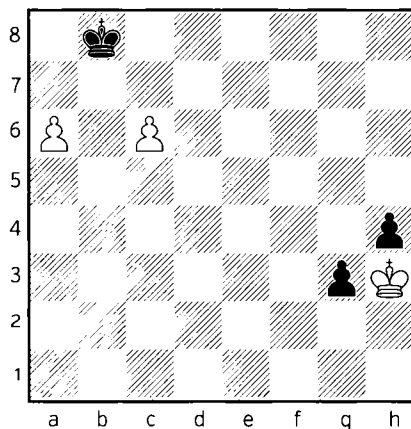
2.b6

The pawn cannot be taken

2...♔d7 3.♔h2 ♔c8 4.d6 ♔b7 5.d7+-

2

PRACTICAL POSITION



In middlegames connected passed pawns are much stronger than the separated ones. However in endgames it often happens, that the connected pawns can be blockaded, while the separated ones cannot be stopped by only one piece. White could not make progress, however zugzwang plays a very important role in many endgames. White skips the move to Black with

1.♔g2!

The king has to move and one of the pawns promote.

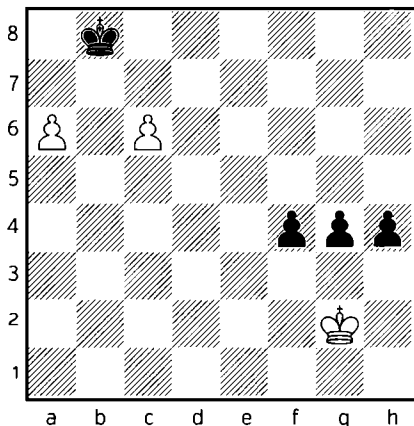
1...♔c7

1...♔a7 2.c7+-

2.a7+-

3

PRACTICAL POSITION



Black already has three pawns, but if the king could stop them alone, White can win again by the same zugzwang as in the previous example.

1. ♔g1!

Does the job! Other moves are actually losing. For instance 1. ♔f1 h3! 2. ♔g1 g3-+ f3 next and the pawns promote.

1...h3

1...f3 2. ♔f2 h3 3. ♔g3+- transposes to the main line.;

1...g3 2. ♔g2+-

2. ♔h2 f3 3. ♔g3

Black finds himself in the first zugzwang!

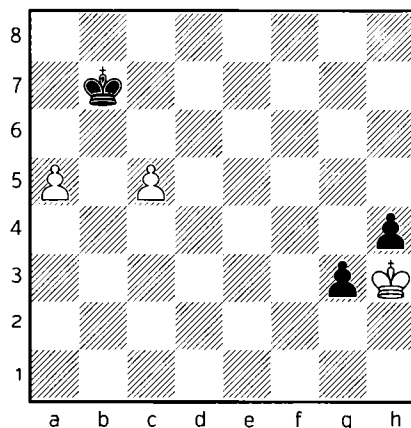
3...f2 4. ♔xf2 h2 5. ♔g2 g3 6. ♔h1!+-

Setting Black into the decisive zugzwang.

6...♔c7 7.a7+-

4

PRACTICAL POSITION



Let us move the separated pawns one rank backward and check if there is any difference.

1. ♔g2

Setting Black into zugzwang, but this time it is not a decisive one. However it is very important to realize, that the separated pawns defend each other indirectly.

1...♔a6

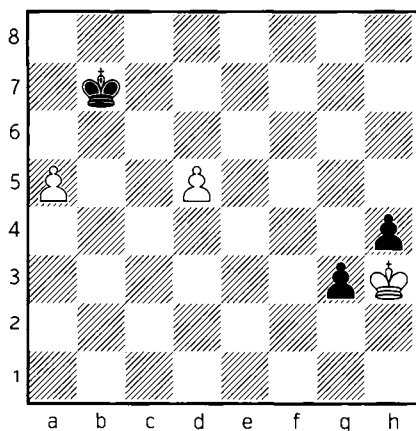
On 1...♔c6 2.a6 and the game is drawn after 2...♔c7 3.♕h3 ♔c6! (But not 3...♔b8?? 4.c6+-) 4.♕g2= because neither side can move with his pawns.

2.c6 ♔a7 3.♕h3 ♔a6 4.♕g2=

With a forced repetition for both sides.

5

PRACTICAL POSITION

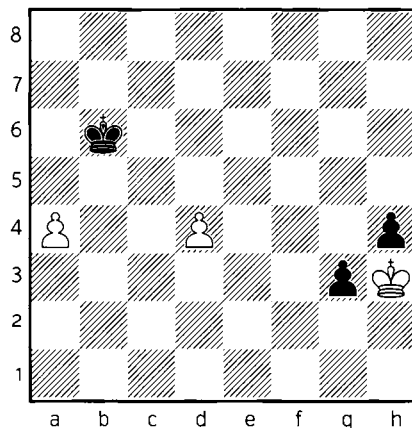


If there are two lines between the separated pawns and they have reached the 5th rank, they cannot be stopped. One of the pawns can be sacrificed to lure out the king from the other one's square.

1.d6 ♔c6 2.a6+-

6

PRACTICAL POSITION



Let us move the separated passed pawns one rank backward and analyse the conclusions.

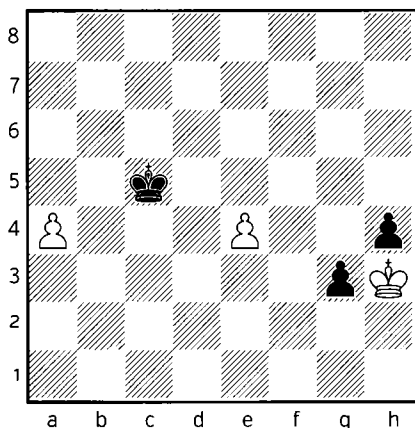
1.♕g2 ♔a5 2.d5 ♔b6!

and Black actually wins, as he can take the d5 pawn without leaving the square of the a-pawn.

3.♕h3 ♔c5 4.a5 ♔xd5 5.a6 ♔c6-+

7

PRACTICAL POSITION



Putting another line between the separated pawns changes the evaluation again. White wins now after

1.a5 ♖b5 2.e5+-

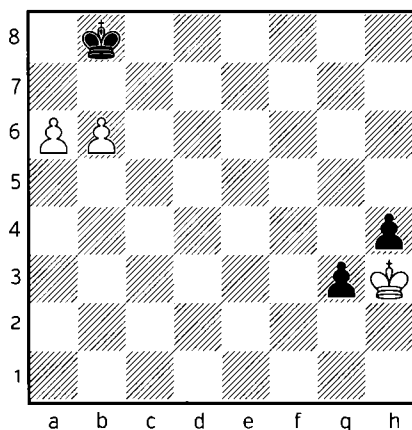
Conclusion: The separated pawns promote if there are as many lines between them as many squares they are from the promotional square. The a6-c6, a5-d5, a4-e4, a3-f3 pawns are winning against the king.

4.3. CONNECTED PASSED PAWNS VS CONNECTED PASSED PAWNS

In most of the cases, this kind of end-games ends in a draw, because neither side can make progress. Exceptions could be if one of the connected pawns are much more advanced, because the king of the stronger side might go for their support, let the opponent's pawn to promote, but he is still faster.

1

PRACTICAL POSITION



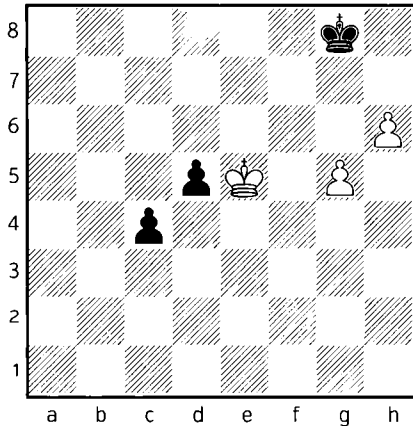
Connected passed pawns against connected passed pawns should obviously be a draw.

1. ♖g2 ♖a8 2.a7 ♖b7 3. ♖h3 ♖a8=

Neither side can improve.

2

PRACTICAL POSITION



However if one of the connected passed pawns are more advanced, there can be exceptions if the king of the stronger side can switch from the blockade to the support of his own pawns.

1.g6!

Black can let the c-pawn go, because he can be faster with the help of the king. 1.♔d4 ♕h7 2.♔c3 ♕g6 3.♔d4=

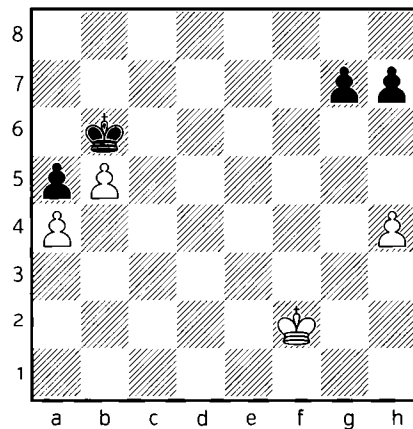
1...c3 2.♔f6 c2 3.h7+ ♔h8 4.♔f7 c1♚
5.g7+ ♔xh7 6.g8♚+ ♔h6 7.♚g6#

4.4. PROTECTED PASSED PAWNS

Protected passed pawns are an improved version of the distant passed pawns. Improved, because it can be used as a distant passed pawn, but it is also protected, so the opponent's king can never take it and the king must always stay in its square.

1

PRACTICAL POSITION

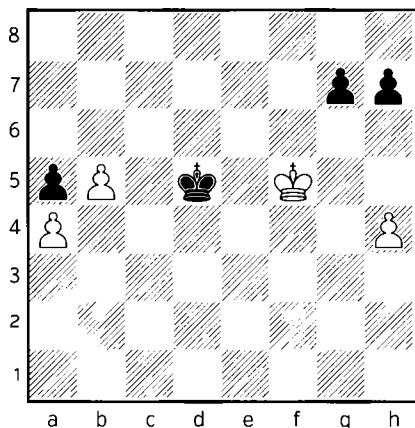


An illustrative example to see the strength of a passed pawn in complex pawn endgames. The black king must stay in the square of the b-pawn, while the white one is free to move around the board. He goes now to collect the kingside pawns.

1.♔e3 ♔c5

1...g6 2.♔f4 h6 3.♕e5 g5 4.hxg5 hxg5
 5.♕f5+- We have already seen this
 endgame before. White had to pay
 attention to get the position with the
 king on c5 and b7 with Black to move,
 otherwise the b6-♕a6-♕c6 stale-
 mate motif might save Black.

2.♕e4 ♔d6 3.♕f5 ♔d5



We should also notice Black's de-
 fense, how he stands in the square of
 the b5 pawn and also tries to block
 the king's route towards the g7 pawn.
 However the protected passed pawn
 can be used as well as a distant passed
 pawn. White wins by deflecting the
 king with

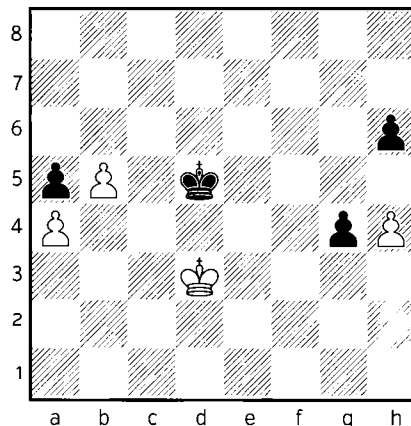
4.b6! ♕c6 5.♕e6 ♕xb6 6.♕f7 ♕c5
 7.♕xg7 h5 8.♕g6 ♕b4 9.♕xh5 ♕xa4

The pawns promote in the same time,
 but the white queen controls the a1
 square at the end.

10.♕g5 ♕b4 11.h5 a4 12.h6 a3 13.h7
 a2 14.h8♕+-

2

PRACTICAL POSITION



White already has a protected passed
 pawn on b5, but Black also wants to
 create one with h5. However it can be
 avoided by

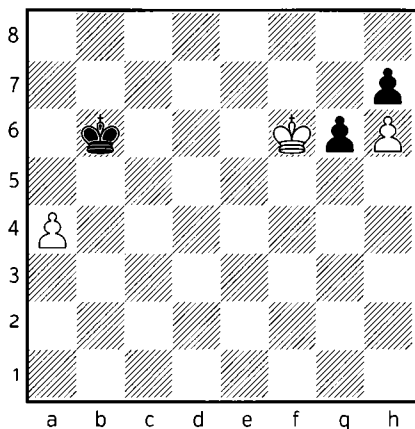
1.h5!

separating the black pawns from each
 other followed by going towards the
 g4 pawn.

1...♕e5 2.♕e3 ♔d5 3.♕f4+-

3

PRACTICAL POSITION

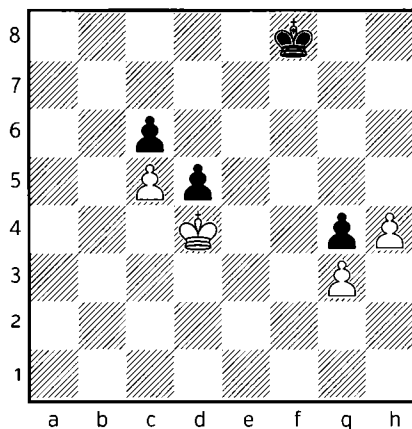


Another very important idea is, when the protected passed pawn is not advanced far enough, it is possible to go for the backward defender, because the pawns are promoting in the same time.

1. ♔g7 g5 2. ♔xh7 g4 3. ♔g7 g3 4. h7
g2 5. h8 ♚ g1 ♚+=

4

PRACTICAL POSITION



Both sides have a protected passed pawn, however there is a very big difference between them. The g4 pawn is still in the square of the d5 pawn, therefore White can collect it with his king..

1. ♔e5 ♔g7 2. ♔f5 ♔h6 3. ♔xg4

The question is, if the extra pawn is enough for the win, or due to the protected passed pawn on d5 White cannot support his connected passers with his king and Black holds?!

3... ♔g6 4. ♔f4

White will occupy the f5 square with the king, from where it holds the d5 pawn and close enough to advance his own passers.

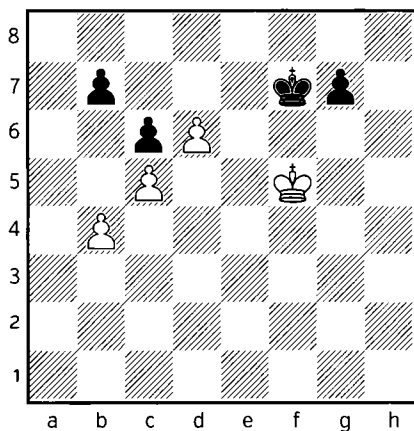
4...♔f6 5.h5 ♔g7 6.g4 ♔h6 7.♔f5
♔h7 8.g5 ♔g7 9.h6+ ♔h7

The pawns cannot move forward automatically, but the king joins to the game.

10.♔f6 d4 11.g6+ ♔xh6 12.g7 d3
13.g8♙+

5

PRACTICAL POSITION



White has a protected passed pawn, but he cannot make progress because of the g7 pawn, which can be protected by the king from f8 as it still stands in the square of the d6 pawn.

1.♔g5
1.♔e5 ♔e8 2.♔e6 ♔d8= And White obviously cannot play 3.♔f7?? g5 This is the difference, when the pawn is back on the 7th rank, suddenly the king cannot catch it.

1...♔e8
But not 1...♔f8? 2.♔g6 and Black is in zugzwang.

2.♔g6
Otherwise ♔f7.

2...♔f8
White cannot waste a tempo to set Black into zugzwang. The outflanking idea with

3.d7
does not help

3...♔e7 4.♔xg7 ♔xd7 5.♔f7 ♔d8
6.♔f8

6.♔e6 ♔e8 7.♔d6 ♔d8= Black holds the opposition and the draw.

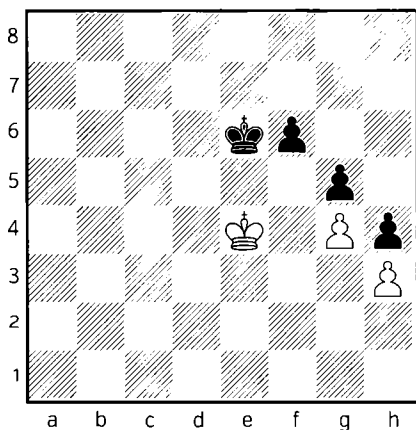
6...♔d7=

4.5. THEORETICAL POSITIONS

In this chapter we study some more complex theoretical endgames. I would like to draw your attention especially on the first example, which has a very big practical importance as it occurs in many games. Try to keep it in mind.

1

THEORETICAL POSITION



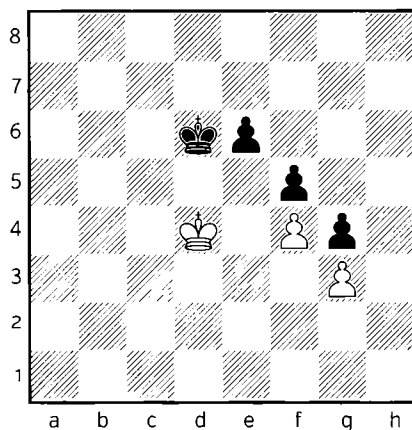
We have seen, that the h3 pawn was easily holding against the h4-g5. We continue the pawn chain for both sides and the outcome does not change. White just waits with ♔d4-e4 and the only way to make progress for Black is the f5 break...

1. ♔d4 f5 2. gxf5+ ♔xf5 3. ♔e3=

and White holds by the same strategy, just moving his king on f3-e3 and when Black pushes g4, hxg4 followed by running to the corner.

2

PRACTICAL POSITION



Let's move all pieces one file to the left. Black is already winning now. The explanation is simple, after the execution of the e5 and f4 breaks, the g-pawn will remain on the board instead of the h-.

1. ♔c4

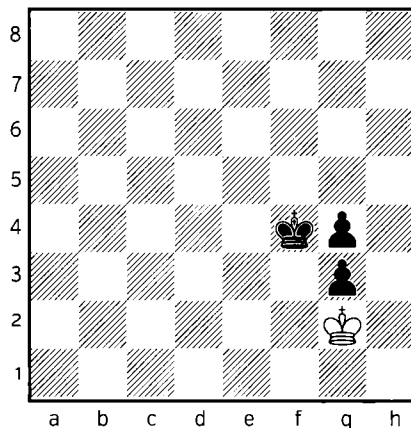
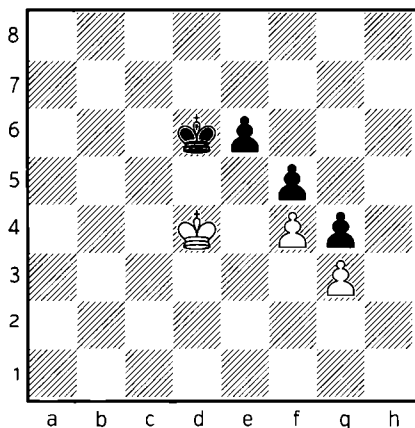
1. ♔d3 ♔d5-+;

1. ♔e3 e5 2. fxe5+ ♔xe5 3. ♔d3 (3. ♔f2 ♔d4-+ and the king invades.) 3...f4-+

1...e5 2. fxe5+ ♔xe5 3. ♔d3 f4 4. gxf4+ ♔xf4-+

3

PRACTICAL POSITION



The situation is slightly more complex if in the initial position Black is on move. However the position is still winning, just the he must give to move to White by using the method of triangulation.

1... ♖c6!

But not 1...e5+ after which White could get the opposition with 2.fxe5+ ♖e6 3.♔d3! and only after 3...♖xe5 4.♖e3!= ♖d5 5.♔d3= Holding the opposition!(But not the active 5.♖f4? because after 5...♖e6 6.♖e3 ♖e5-+ Black takes the opposition and wins like we had seen in the previous example.)

2. ♖e5

The problem is 2.♔c4 loses to the pretty break through 2...e5! 3.fxe5 f4! 4.♔d3 f3! (However 4...fxg3? spoils the win 5.♖e2 ♖d5 6.♖f1 ♖xe5 7.♔g2 ♖f4

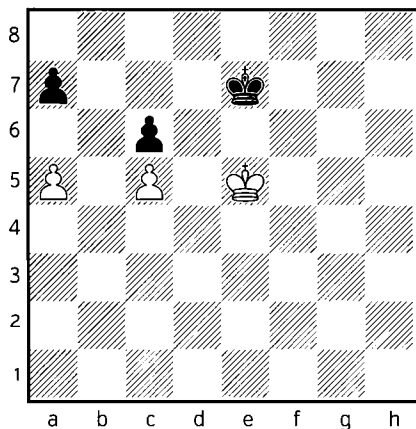
We haven't seen this theoretical position before, but it is a draw. White holds the draw like without the g4 pawn. The second g-pawn is too far advanced and Black cannot lose a tempo 8.♖g1 ♖f3 9.♖f1 g2+ 10.♖g1= and stalemate in any case, regardless what Black puts on g3.) 5.♖e3 ♖d5-+ is winning as we already know. Black had to give up his f3-pawn to avoid stalemate ideas followed by outflanking with the king, collecting the g3 pawn and win because of the king has reached the 3rd rank.

2... ♖d7 3. ♖d4 ♖d6-+

Black gave the move to White and we transposed to our previous position.

4

▷ V. BOLOGAN
 ▶ E. DIZDAREVIC
 SARAJEVO, 2004

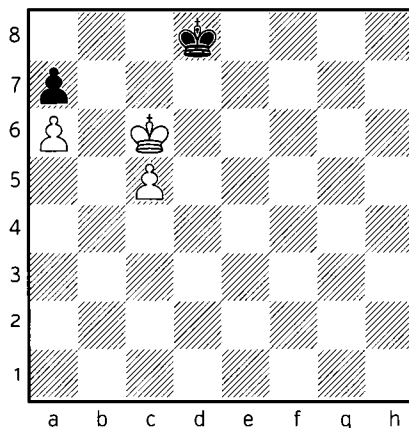


64.a6!

White has the more active king and he is going to outflank because of the opposition, but is it enough for the win?!

64...♔e8?

A blunder after which White wins easily. However a theoretical draw could have been reached after 64...♔d7! 65.♔f6 ♔d8 66.♔e6 ♔c7 67.♔e7 ♔c8 68.♔d6 ♔d8 69.♔xc6



69...♔c8!= And White cannot win because of the stalemate that is generated by the a6 pawn and the black king cannot move to b7... 70.♔d6 ♔d8 71.c6 ♔c8 72.c7 Stalemate!

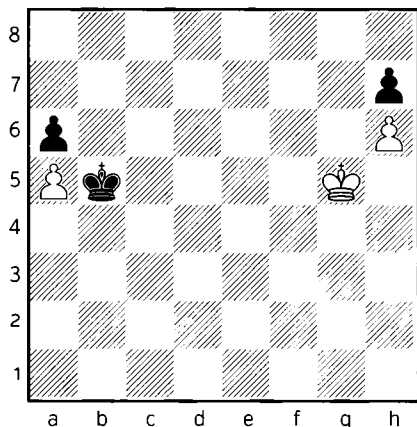
65.♔e6!

Keeping the opposition in order to take the c6 pawn at ideal circumstances. Black resigned in view of 65.♔e6 ♔d8 66.♔d6 ♔c8 67.♔xc6 ♔b8 68.♔d7+-

1-0

5

▷ H. WILHELM
 ▶ B. LARSEN
 POLITIKEN COPENHAGEN,
 2007



One of the most dangerous thing in chess is the automatic capture. Black could have saved the game if he resists to the temptation.

55... ♖xa5?

55... ♖c6! would have held the draw
 56. ♖f6 ♖d6 57. ♖g7 ♖e7 58. ♖xh7
 ♖f7 59. ♖h8 ♖f8=

56. ♖f6 ♖b4 57. ♖g7 a5

Despite Black starts to push his passed pawn first, White promotes sooner because of the more advanced pawn. Quality of the pawns also matters a lot!

58. ♖xh7 a4 59. ♖g8 a3 60. h7 a2
 61. h8 ♚+ 1-0

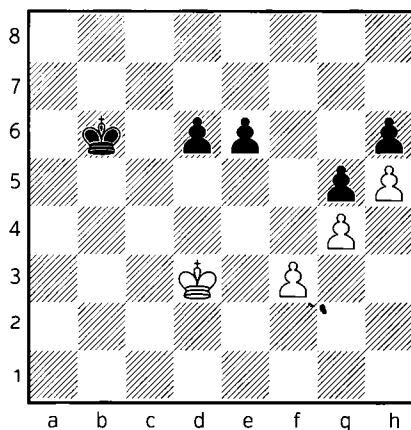
4.6. BREAKTHROUGH

If we create a passed pawn by sacrificing a pawn, we call it a breakthrough.

This is perhaps the nicest topic of the book — or at least my favorite one — with many unexpected breakthroughs. We show you some typical examples, but one must never forget about the different possibilities when he goes too far with his king.

1

PRACTICAL POSITION



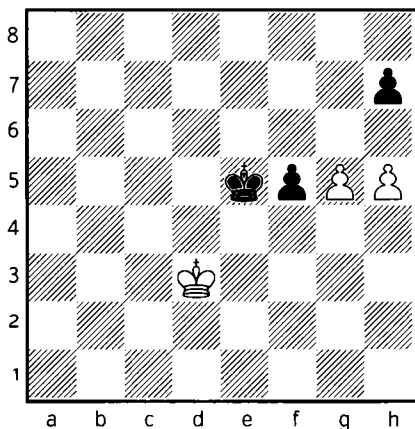
Black is a pawn up, but the following break through motif turns the outcome with 360 degrees.

1. f4! gxf4 2. g5! hxg5 3. h6+-

The quality is often more important, than the quantity.

2

PRACTICAL POSITION



We are about to learn a very important pawn pawnendgame trick. I have seen it so many times in practice and I wish to the readers to win as well some nice games with the following motif:

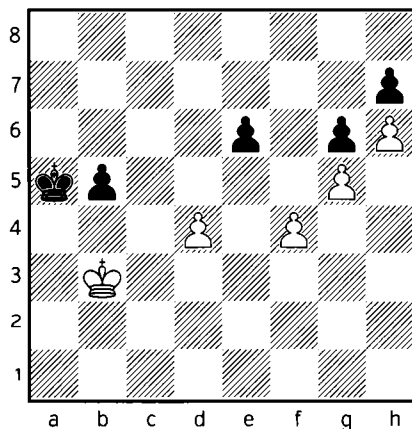
1.h6!

Black cannot prevent g6 and the pawn promotes.

1...♔e6 2.g6! hxg6 3.h7+-

3

PRACTICAL POSITION

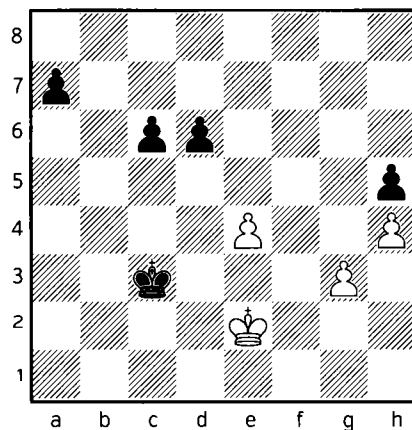


White first deflects the e6 pawn to execute the standard break through.

1.d5! exd5 2.f5! gxf5 3.g6! hxg6 4.h7+-

4

PRACTICAL POSITION



White must pay attention again on the details while executing the break through.

1.e5!!

Pretty diagonal closing sacrifice in order to block the king's path which was in the square of the h-pawn. 1.g4? is met by 1...♔d4! Black stops the pawn.

1...dxe5

1...d5 is too slow 2.e6 d4 3.e7+- Black fails by one tempo to play ♔c2 in time.

2.g4! hxg4

And 2...♔d4 already does not help 3.gxh5+-

3.h5

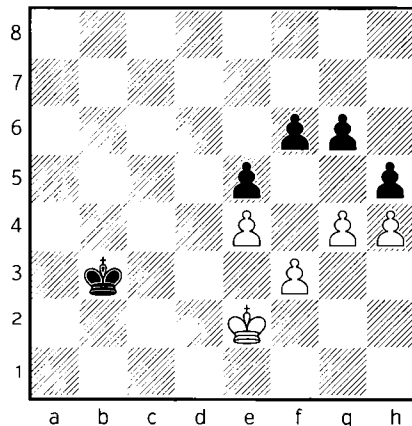
The game is not over yet, Black also has two advanced passers, but he is just unlucky to hold because of the unfortunate placement of his king.

3...g3 4.h6 g2 5.♔f2 e4 6.h7 e3+ 7.♔xg2 e2 8.h8 ♚++-

Check!

5

PRACTICAL POSITION



Black is trying to outflank his opponent with his more active king, but an unexpected break through changes the final result again.

1.f4!! exf4

1...hxg4 loses to 2.f5! gxf5 3.h5+-

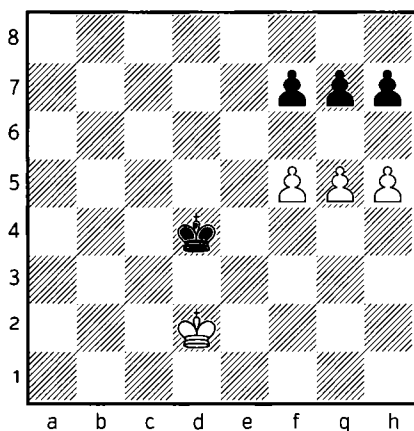
2.g5! fxg5 3.e5

The pawn cannot be stopped, the question is if Black can do something with his own passers. However the white king is close enough to stop all of them

3...gxh4 4.e6 h3 5.♔f2 h2 6.♔g2 f3+ 7.♔xh2 f2 8.♔g2+-

6

PRACTICAL POSITION



Black is about to collect all the pawns, but one of the most famous breakthrough makes a full change on the final outcome.

1.g6!! hxg6

On 1...fxg6 2.h6! gxh6 3.f6+- wins.

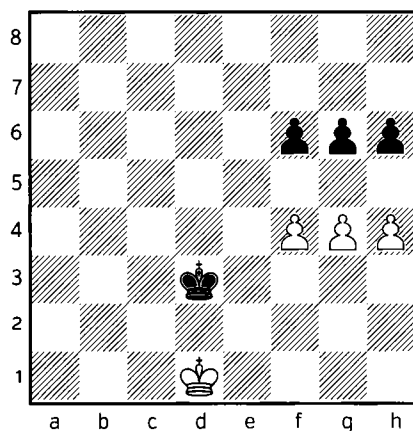
2.f6!

Really beautiful motif!

2...gxf6 3.h6+-

7

PRACTICAL POSITION



If we move all the pieces one rank back, we get a very interesting study-like endgame. Black is threatening to win the pawn with ♔e4, therefore the only chance lays again in the breakthrough.

1.g5! hxg5!

Only move for Black as well! 1...fxg5 loses to 2.h5! gxh5 (2...gxf4 3.hxg6 f3 and 4.♔e1!+-) 3.f5 h4 4.♔e1!+- and the king catches the pawns.

2.fxg5!

White must settle for draw with this move, otherwise he loses! 2.hxg5? f5--+

2.f5? gxh4! 3.fxg6 h3--+ and the king is too far now from the h-pawn.

2...fxg5!

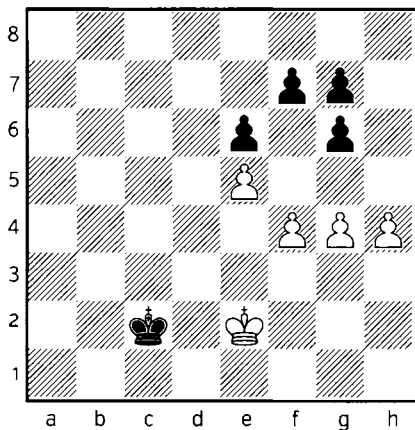
2...f5? 3.h5 gxh5 4.g6 h4 5.g7+-

3.hxg5 ♔e3 4.♔e1 ♔f4 5.♔f2 ♔xg5
6.♔g3

and the game ends with a theoretical draw.

8

PRACTICAL POSITION



It looks like Black has an extremely safe phalanx on the kingside, but White can still execute a decisive breakthrough. The lines of this study is just beautiful to the eyes.

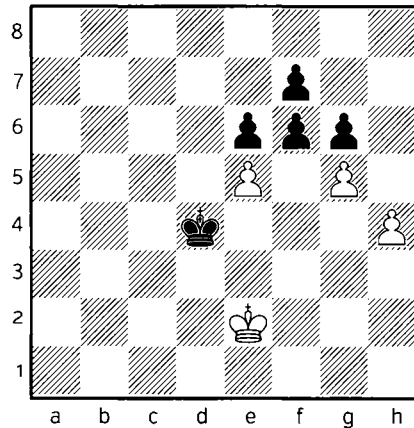
1.g5!! ♔c3 2.f5!! ♔d4

2...exf5 3.h5! gxh5 4.g6! The kamikaze pawns make a queen from the e-pawn. 4...fxg6 5.e6+-;

2...gxf5 3.h5+-

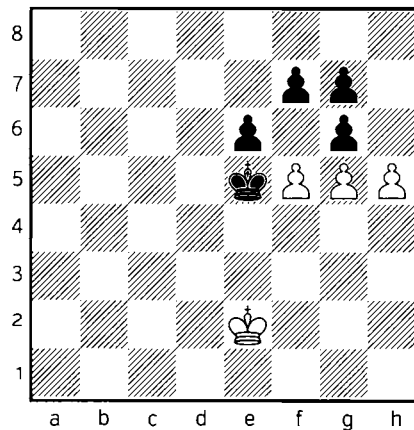
3.h5!!

Fantastic how all the white pawns are just moving forward to break through! Actually 3.f6! is also winning if White finds 3...gxf6



4.h5!! gxh5 5.g6!! fxg6 6.exf6+-

3...♔xe5



3...gxh5 4.g6! fxg6 5.fxe6+-

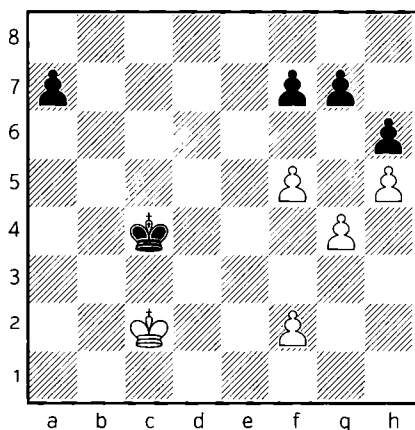
4.f6!

Only this move, as otherwise the black king catches the h-pawn through f6.

4...gxf6 5.h6!+-

9

PRACTICAL POSITION



It looks like Black is going to win with his distant passed pawn, but as we already know in this chapter, a breakthrough changes the outcome.

1.f6!!

But not 1.g5? because of 1...f6! Black prevents the breakthrough and wins the game. (The idea would have been 1...hxf6? 2.f6! gxf6 3.h6+-)

1...gxf6 2.f4! ♖d5 3.g5! fxf6 4.fxf6 ♖e5

Black manages to catch the pawn, but he cannot save the game because of

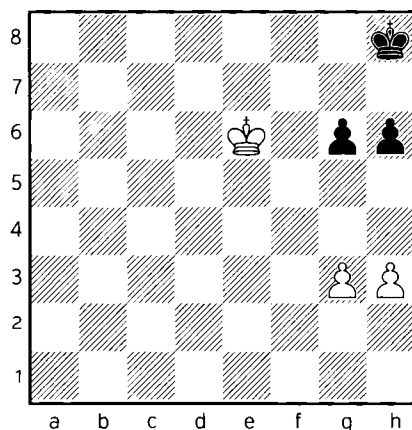
his own f7 pawn. We are already familiar with this idea from the previous chapters.

5.gxf6 ♔f6 6.♖b3+-

and Black soon finds himself in zugzwang after losing his a-pawn.

10

PROKES

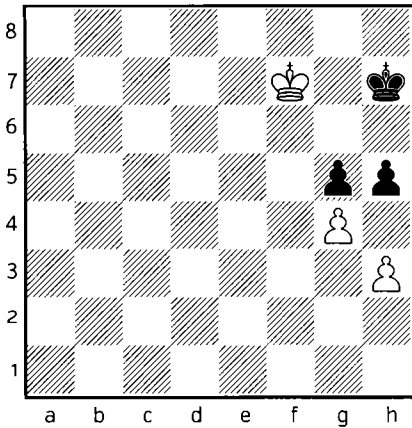


The following study of Prokes also ends with a nice breakthrough

1.♖f6!

1.♖f7 leads only to draw 1...♖h7 2.g4 (2.♖f6 h5 3.h4 ♖h6=) 2...g5! 3.♖f6 h5! 4.♖xg5 hxg4 5.hxg4 ♖g7=

1...♖h7 2.g4! g5 3.♖f7 h5

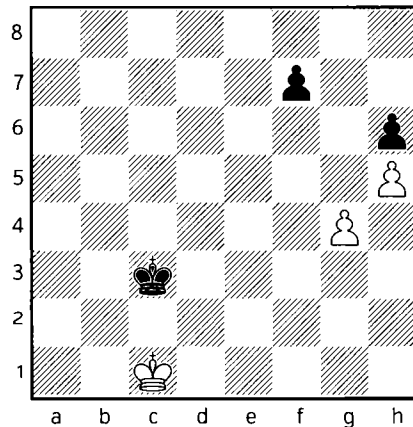


4.7. PREVENTING THE BREAKTHROUGH

We have already studied a lot of breakthroughs, but in this chapter we learn some methods how to fight against some of them.

1

PRACTICAL POSITION



With the king on f6 this motif saved Black, but now...

3... ♔h8 4. ♔g6+-

4. h4!

White makes a queen on g8 in all the lines.

4... ♔h6 5. ♔f6!

The last necessary subtlety to obtain a g-passed pawn.

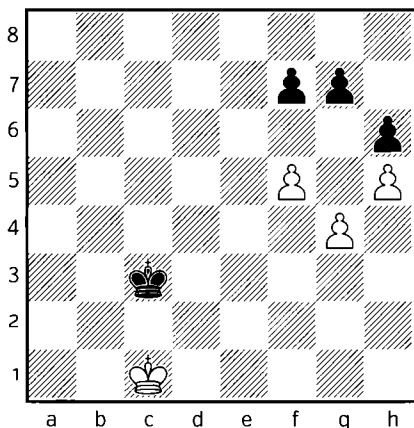
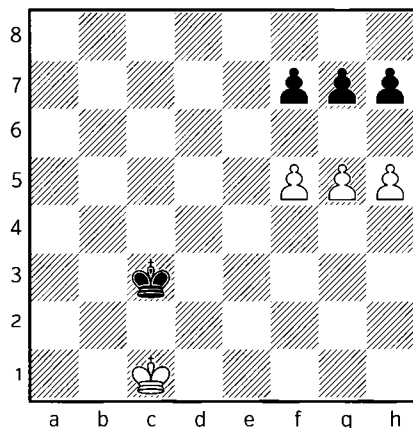
5... gxf4 6. g5+ ♔h7 7. ♔f7! h3 8. g6+ ♔h6 9. g7 h2 10. g8 ♖h1 ♖h1 11. ♖g6#

The black king is ideally placed to collect all the pawns, but White is threatening with the typical breakthrough of g5! Black must prevent it first before starting the harvesting.

1... f6!

And the rest is easy.

2. ♔d1 ♔d3+-

2**PRACTICAL POSITION****3****PRACTICAL POSITION**

In this example, the black king is more active again, but White has prepared the standard breakthrough with

1.g5!?

With the threat of f6, which works even after hxg5. However, Black can prevent the breakthrough by playing

1...f6!-+

There is no more chance for a successful breakthrough and the pawns start to fall one by one.

We have already studied this position with White to move. He is threatening with g6! and after fxg6 h6! gxh6 f6! wins or after g6! hxg6 f6! gxf6 h6! wins. Black must prevent it and he can do it only by playing

1...g6!

The game simplifies now to draw by forced after

2.hxg6 hxg6 3.fxg6 fxg6

and Black takes the g5 pawn, but White holds the opposition.

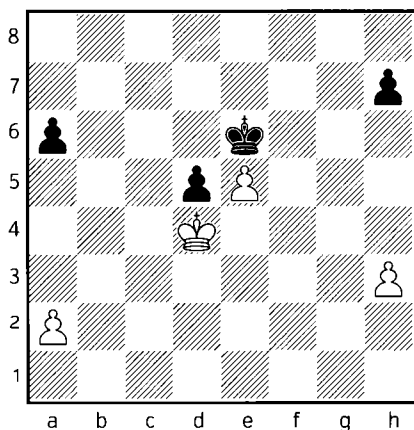
**4.♔d1 ♔d3 5.♔e1 ♔e3 6.♔f1 ♔f3
7.♔g1 ♔g4 8.♔g2 ♔xg5 9.♔g3=**

4.8. ZUGZWANG – METHOD FOR CALCULATING THE RESERVE TEMPI

In this chapter we learn a very important and very useful practical idea to make our calculation much more easy in the situations, when the kings are in zugzwang and the one who loses first all his reserved tempi with his pawns, that loses the game.

1

PRACTICAL POSITION



The tension is really high in the center. The side that loses all his tempi first, that is going to lose his central pawn and the game. How to calculate such endgames? The general advice which helps in almost all the cases is to calculate those pawn moves first for both sides which has already left it's initial place! Let us analyse the following couple of positions with both sides on move.

1.h4

The h-pawn has already moved, therefore White should push it first. Black must do the same Other moves are much easier to calculate. For instance 1.a3 a5 2.a4 and Black must play 2...h6 3.h4 h5-+

1...a5! 2.h5 a4!

Otherwise Black loses after 2...h6? 3.a4+-

3.h6

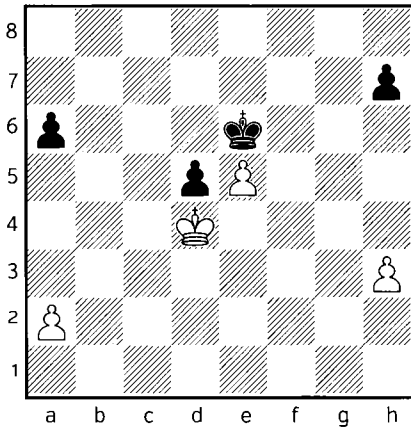
3.a3 h6-+

3...a3-+

and White got into zugzwang.

2

PRACTICAL POSITION



Now Black to move. The story and the lines are exactly the same

1...a5 2.h4!

But not something with the other pawn 2.a4? h6! 3.h4 h5-+

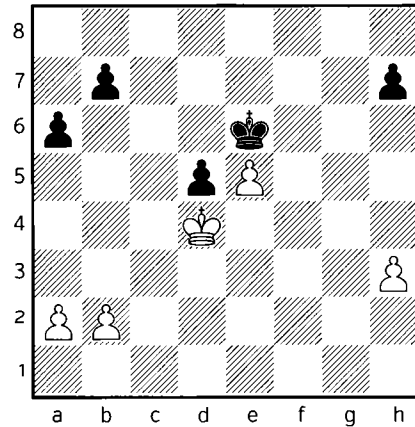
2...a4 3.h5! a3

3...h6 4.a3+-

4.h6+-

3

PRACTICAL POSITION



Let's add one-one b-pawns to make our example more complex. The variety of the moves are much more wide, however it does not affect the general principle, both sides should calculate those pawn moves which have already moved. We check first if White to move, but we go through on all options for both sides to have a more clear view about the endgame. Only winning move is

1.h4!

Others are even losing, there is no draw now, the question is who gets into zugzwang. If White wants to limit the pawn moves on the queen-side with 1.b4? Black has to find an only move to win, any other options are losing 1...h6! and react according to White's next move... 2.a4 (2.a3 b5! 3.h4 h5-+) 2...b6 3.a5 b5 4.h4 h5-+;

1.a3? is met by 1...a5 Threatening with a4, sparing two moves with the b-pawn, therefore White has to play 2.b3 b5! 3.b4 a4 4.h4 h5-+;

1.a4? loses easily to 1...a5 2.h4 h5 3.b3 b6-+;

1.b3? a5 2.h4 h5! 3.a3 (3.a4 b6-+) 3... b5 4.b4 a4-+

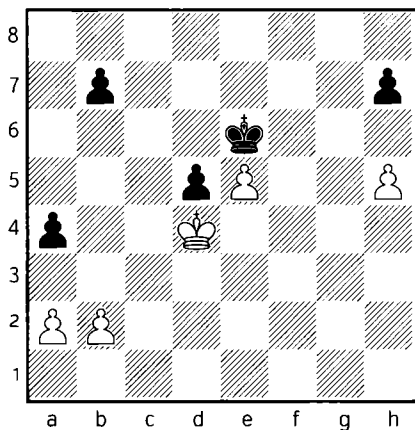
1...a5

This is Black's best chance as well, but if White continues correctly he is losing.

2.h5!

Following the principles! White continues pushing the pawn, that had already moved!

2...a4



After 2...h6 it is easy to calculate 3.a4 b6 4.b3+-;

2...b6 3.a4 h6 4.b3+-;

2...b5 3.h6 b4 4.b3+-

3.h6!

Moving with the pawn until it reaches its final destination.

3...b6

3...a3 is tricky, but does not help 4.bxa3 b5 5.a4! bxa4 6.a3+-;

3...b5 4.a3+-

4.b4!

Only move again, just as all the others before. 4.b3? a3 5.b4 b5-+

4...axb3

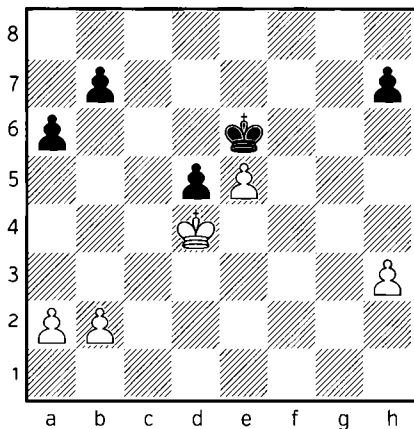
4...a3 5.b5+-;

4...b5 5.a3+-

5.axb3 b5 6.b4+-

4

PRACTICAL POSITION



Now let's see, what happens if it is Black's turn. Actually Black's task is much easier, but still the winning path is

1...a5! 2.h4

2.a4 loses to 2...h6! 3.h4 h5 4.b3 b6-+;

2.b3 b5 3.a3 h6 4.h4 h5 5.b4 a4-+

2...a4

Here, other moves were also winning, but why to change on the winning strategy?!

3.h5

3.b4 axb3 4.axb3 h5 5.b4 b5-+

3...h6 4.b3

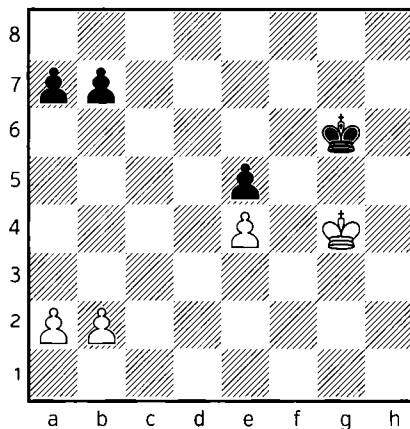
4.a3 b5-+;

4.b4 axb3 5.axb3 b6 6.b4 b5-+

4...axb3 5.axb3 b6 6.b4 b5-+

5

PRACTICAL POSITION



Let's analyse another zugzwang position. Actually it is not mutual zugzwang, as White can play ♔h4 which is answered by ♔h6, but if Black loses all his tempi on the queenside and he is forced to move with his king, then ♔f6 loses to outflanking with ♔h5. Both pawns are standing in their initial positions, so we cannot push the one which has already moved. Let's check this position again with both sides to move.

1.a4

1.a3 2.a4 a5 3.b3 b6 4.♔h4 ♕h6
5.♕g4 ♕g6=;

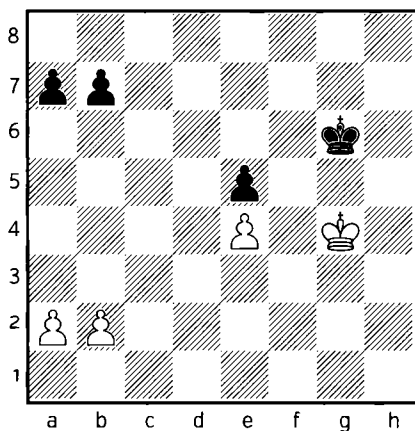
1.b4 b5 2.a3 a6 3.♕h4 ♕h6 4.♕g4
♕g6=

1...a5 2.b3 b6 3.♕h4 ♕h6=

As we could see, Black only needs to copy what White does and at the end White runs out of tempi.

6

PRACTICAL POSITION



Now, it is Black to move. We have already seen the strategy in the previous example, White just needs to copy his opponent's move and Black runs out of moves...

1...b6

1...b5 2.b4 a6 3.a3 ♕f6 4.♕h5+-;

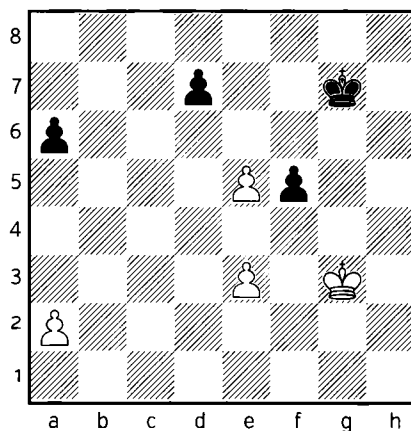
1...a5 2.a4 b6 3.b3 ♕f6 4.♕h5+-;

1...a6 2.a3 b5 3.b4 ♕f6 4.♕h5+-

2.b3 a6 3.a3 b5 4.b4 ♕f6 5.♕h5 ♕f7
6.♕g5 ♕e6 7.♕g6+-

7

PRACTICAL POSITION



The next example is already very easy after the previous ones, but the first move is important.

1.♕f4!

White has to set the zugzwang position first, before we start to calculate the tempi. On 1.a3? Black is not forced to use his tempi, but he can improve his king with 1...♕f7! keeping the movements of the a-pawn in reserve.

1...♕g6 And now

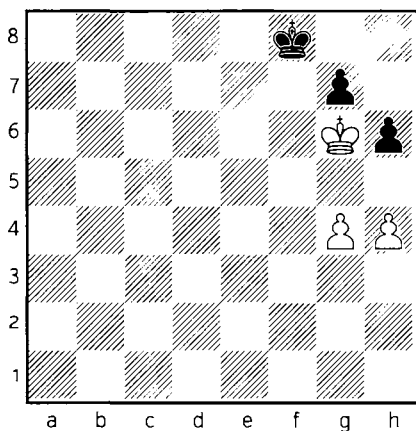
2.a3! a5 3.a4+-

4.9. GOING BEHIND THE PAWNS

This technique often can be employed when the stronger side has a more active king. By getting behind the target with the king, the stronger side can often squeeze out the other king and win the weakness. Another very important idea to remember.

1

PRACTICAL POSITION



Getting behind the pawn is another motif, that we must keep in mind in all the pawn endgames. The next example is the most simple, but illustrates perfectly the idea. White wins by playing

1. ♖h7! ♜f7 2.g5!

In most of the cases this is the right follow up after going behind the pawn. Not h5 or some other move.

2...h5

2...hxg5 3.hxg5 g6 (3...♜f8 4.g6+-)
4.♜h6+- and the king is on the 6th rank. White wins;

2...♜f8 3.g6 h5 4.♜h8!+-

3.♜h8! ♜g6

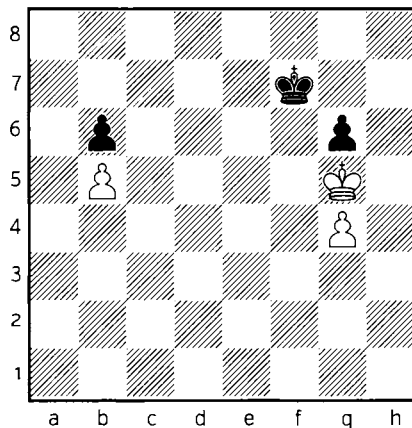
3...♜f8 4.g6+-

4.♜g8!+-

The perfect execution of the plan. White has reached behind the pawn and he takes it next move.

2

PRACTICAL POSITION



White must decide which direction to go with the king. Behind the pawn with ♔h6 or retreat to settle for a draw after ♔f4. It requires calculation, but it is decided by the placement of the two b-pawns.

1. ♔h6!

White wins after

1... ♔f6 2. ♔h7! ♔g5

2... ♔f7 3.g5+-

3. ♔g7! ♔xg4 4. ♔xg6

and the king walks towards the b6 pawn.

4... ♔f4 5. ♔f6 ♔e4 6. ♔e6 ♔d4
7. ♔d6 ♔c4 8. ♔c6 ♔b4 9. ♔xb6+-

Let's check what happens if we move the b-pawns one rank backward. White must agree to draw now by playing

1. ♔f4!

1. ♔h6? The ambitious plan of going behind the pawn is losing because of 1... ♔f6 2. ♔h7 (2.g5+ ♔f5+- Mutual zugzwang, but White is on move, therefore he loses. Another way to reach such positions, that we discussed in the previous chapter. The one who runs out of moves that loses, another situation of the queenside pawns could yield very interesting calculational problems again.) 2... ♔g5! 3. ♔g7 ♔xg4 4. ♔xg6 and now the black king gets faster towards the queenside pawns. 4... ♔f4 5. ♔f6 ♔e4 6. ♔e6 ♔d4 7. ♔d6 ♔c4+-

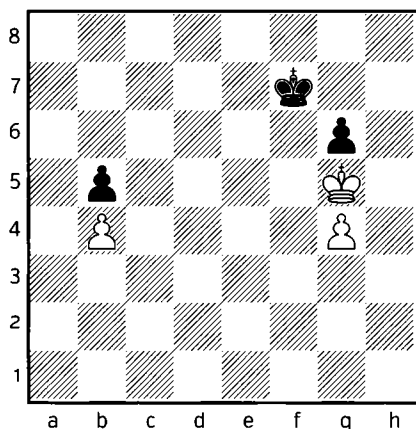
1... ♔e6 2. ♔e4

2. ♔g5 ♔f7=

2...g5=

3

PRACTICAL POSITION



4.10. WIDENING THE SPACE

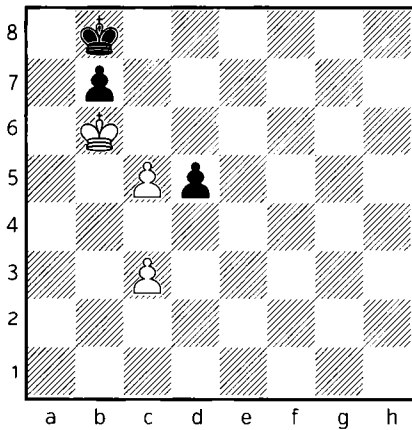
Widening the space is another important technique for those cases, when the stronger side has a more active king, but temporarily all the ways to make progress are blocked. The technique involves the exchange

of that pawn, which prevents the access to the other pawns.

For example: Kings are on c5 and c7 and there is a black pawn on c6, which prevents White to go for the kingside pawns with ♔d5 . Here comes the idea of pushing d4-d5, widening the space towards the kingside by exchanging the c6 pawn.

1

PRACTICAL POSITION



White has a more active king, but temporarily the black king controls all the invading squares, therefore White has to widen the space with

1. c6! bxc6 2. ♔xc6 d4

2... ♔c8 3. ♔xd5+

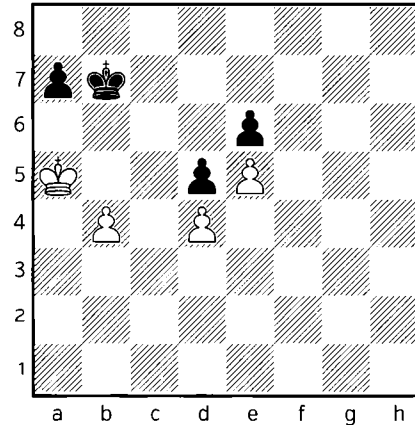
3. cxd4 ♔c8

and White wins because of the reserve tempo with the pawn

4. d5 ♔d8 5. ♔d6 ♔c8 6. ♔e7+

2

PRACTICAL POSITION

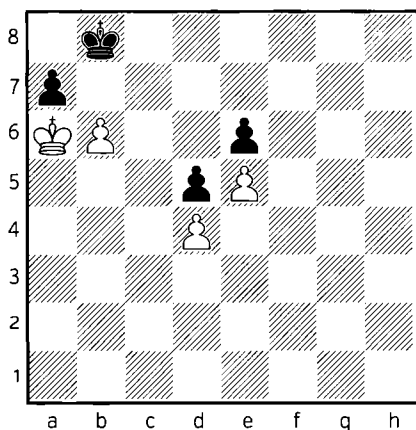


Another example when White should be able to play for win because of the more active king, but the question is how could he make progress because Black seemingly controls all the invading squares. The solution again lays behind widen the space

1. b5!

1. ♔b5 does not serve the same purpose because Black can play 1... a6+! 2. ♔c5 ♔c7 3. b5 axb5 4. ♔xb5 ♔b7= and hold the draw by opposition.

1... ♔c7 2. ♔a6 ♔b8 3. b6



It seems to be over, but Black continues resisting with

3...♔a8!

Unfortunately for him, the nice stalemate attempt does not save him. White is not forced to move with the pawn, but instead

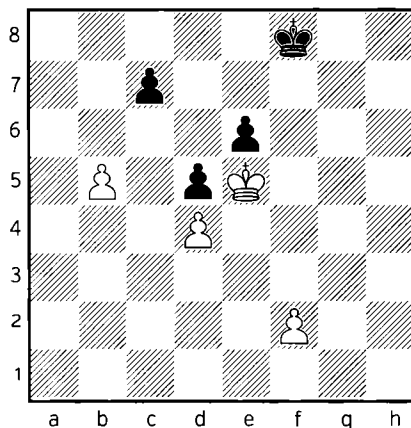
4.♔b5!

followed by removing the pawns and going towards the e6 pawn.

4...♔b7 5.bxa7 ♔xa7 6.♔c6+-

3

PRACTICAL POSITION



White must calculate how to widen the space with f4-f5 depending on from where the black king protects the e6 pawn.

1...♔f7

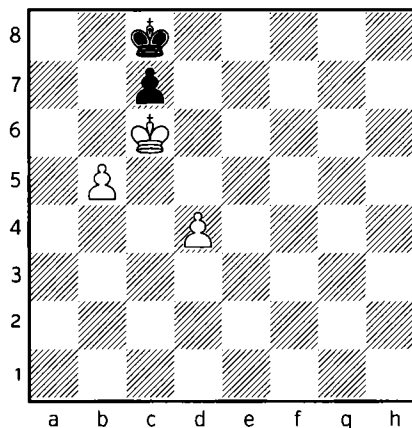
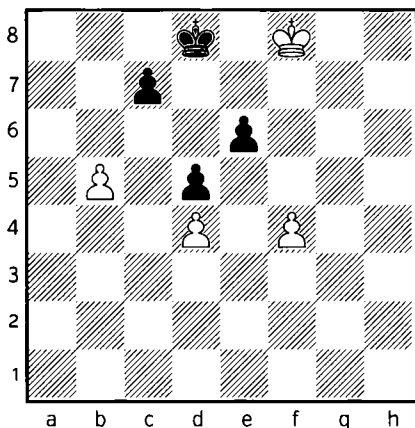
On 1...♔e7 2.f4! transposes to the main line.

2.f3!

White must push f5 when the king is on f7. 2.f4 is too hasty 2...♔e7 3.f5 exf5 4.♔xf5 ♔d6 5.♔f6 trying to outflank 5...c5! only move, but it saves Black!

2...♔e7 3.f4 ♔f7

Allows the going behind the pawn technique with 3...♔d7 4.♔f6 ♔d6 5.♔f7 ♔d7 6.♔f8 ♔d8



At first sight Black successfully controls the invading squares and by holding the opposition White cannot go behind the e-pawn. However, White can triangulate with 7.♔g7! All moves lead to the same 7...♕e7 (7...♕e8 8.♔f6 ♕d7 9.♔f7 ♕d6 10.♔e8 transposes; 7...♕d7 8.♔f7 ♕d6 9.♔e8 also transposes) 8.♔g6! Black is in zugzwang. He must give up the opposition. 8...♕d6 9.♔f6! Thanks to the subtle king manoeuvre, White takes the opposition 9...♕d7 10.♔f7 ♕d6 11.♔e8! Getting behind the pawn. 11...c5 12.bxc6 ♕xc6 13.♔e7+-

4.f5!

Widen the space towards the d5 pawn, but the game is not over...

4...exf5 5.♔xf5 ♕e7 6.♔e5 ♕d8
7.♔xd5 ♕d7 8.♔c5 ♕d8 9.♔c6 ♕c8

10.d5!

It seems to be over, because wherever the black king goes, White pushes that pawn and takes the opposition. As usual the reality is much more complicated than this. We must always pay attention on the defensive resources.

10...♕d8

On 10...♕b8 11.♔d7! (And not 11.b6? because of 11...♕c8!= and Black survives.) 11...♕b7 12.♔d8! ♕b8 (12...♕b6 13.♔c8!+-) 13.b6! cxb6 14.♔e7+-

11.♔b7!

is the winning move! Not falling into the stalemate trap with 11.d6? ♕c8!=

11...♕d7 12.♔b8! ♕d8

12...♕d6 13.♔c8! Again the going behind the pawn motif!

13.d6! cxd6 14.♔a7+-

followed by promoting the pawn with check.

1...♔b8! 2.axb7=

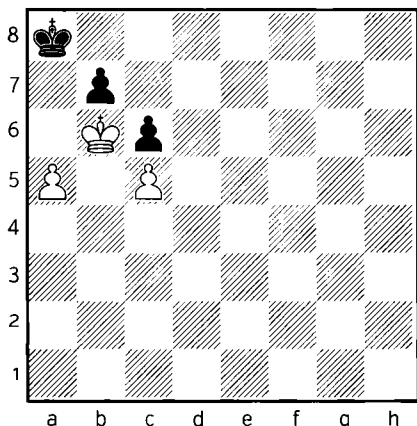
Stalemate! 2.♔a5 ♔a7 3.axb7 ♔xb7=

4.11. STALEMATE

In this chapter we learn some frequently seen stalemate ideas. Don't forget, stalemate is always a hidden resource for the defensive side, that both sides should keep in mind.

1

PRACTICAL POSITION



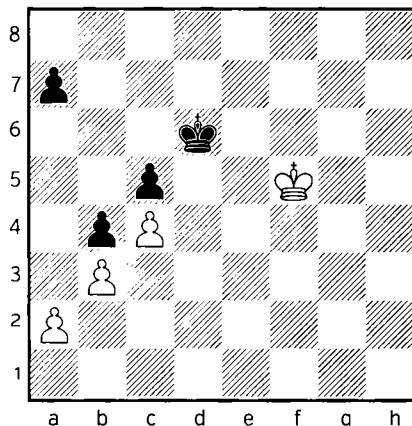
White seems to win by widen the space idea as he collects both pawns afterwards and his king stands on the 6th rank. However the truth is different again

1.a6

is strongly met by

2

PRACTICAL POSITION



White is just executing the outflanking and it seems to be completely over. However a beautiful idea saves Black

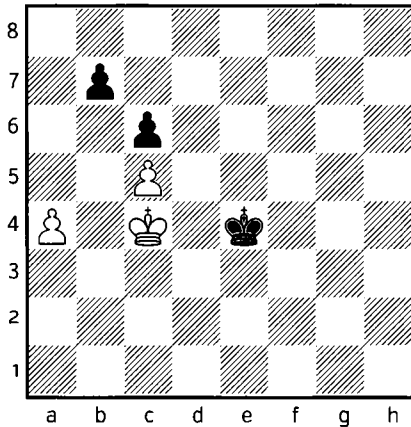
1.♔f6 a6! 2.♔f5 ♔c6 3.♔e6 ♔b6
4.♔d6 ♔a5!

Squeezing himself to the edge of the board and the c5 pawn can only be taken with stalemate! Otherwise White cannot make progress, Black just plays ♔a5-b6 from now on.

5.♔xc5=

3

PRACTICAL POSITION



A more common stalemate motif is the next example. It is very useful to remember, just myself I have seen dozens of games finished like this. Black is about to win by outflanking, but just as in the previous example, White survives by stalemate after

1. ♖b4! ♔d4 2. ♖a5!

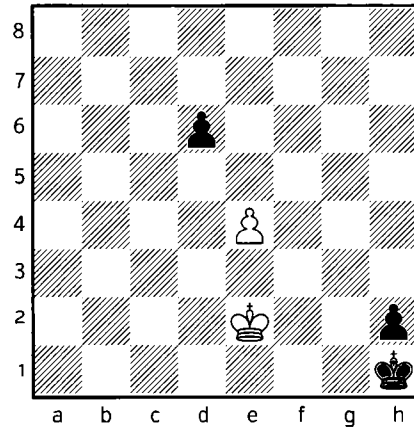
Threatening with ♖b6, therefore Black is forced to capture the pawn.

2... ♔xc5=

Stalemate!

4

PRACTICAL POSITION



Stalemate can not only be used as a defense, but also for attacking purposes. In the next example, White, who is a pawn down squeezes the black king into the corner, which forces him to move with his d-pawn and give free way for the e-pawn.

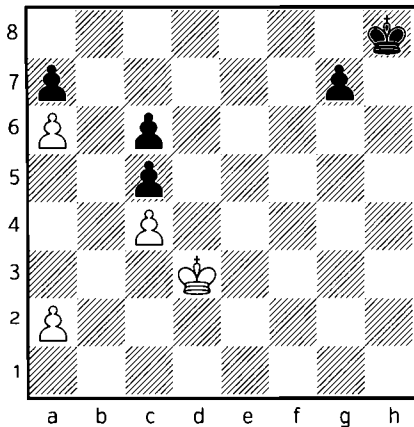
1. ♖f2!

The game would be drawn without the d-pawn, but now Black is even losing after

1... d5 2. e5! d4 3. e6 d3 4. e7 d2 5. e8 ♔
d1 ♖ 6. ♖e4+-

5

PRACTICAL POSITION



Such examples like the next one are rather existing in studies than in practical games, but you never know what your next game brings. Black has a distant passed pawn which should be decisive. However White survives by a brilliant stalemate trick.

1. ♔c3!!

Hmm, where is it going?! One might think, the only chance is to rush towards the a7 pawn, but it is too slow. 1. ♕e4 loses to 1... ♖h7 2. ♕e5 g5 3. ♕d6 g4 4. ♕xc6 g3 5. ♕b7 g2 6. ♕xa7 ♚ - +

1... g5 2. ♕b3! g4 3. ♕a4! g3 4. ♕a5! g2 5. a4!

Self stalemating! An amazing motif!

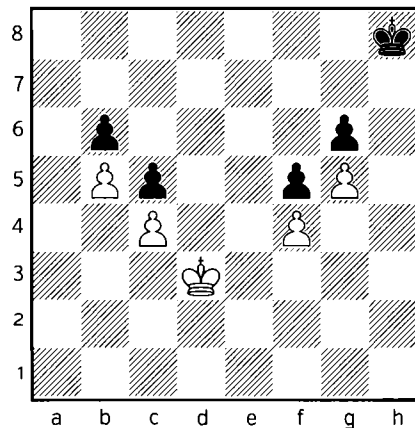
5... g1 ♚ =

4.12. FORTRESS

We speak about fortress, when neither side can break into the opponent's camp because all the entrances are blocked either by the pawns or by the king. Fortresses can be built sometimes with material down. Usually they occur in closed structures, when the pawns cannot move.

1

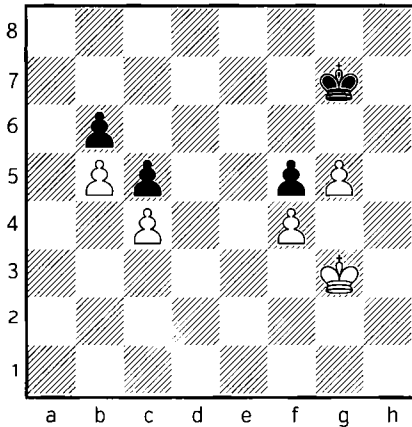
PRACTICAL POSITION



The pawnstructure does not give any entrance to the opponent's camp. An unbreakable fortress. Both sides can walk wherever he wants with his king.

2

PRACTICAL POSITION



White has a protected passed pawn, but he cannot make progress because of the unbreakable fortress, that Black has built. Black just waits with Kf7-g7 and whenever White tries with Kh4 , he goes Kg6 and White must retreat.

1. Kh3

1. Kh4 Kg6= ;

White could widen the space with 1.g6 Kxg6 2. Kh4 but in this he gave up his g5 pawn and Black can block the way with 2... Kh6=

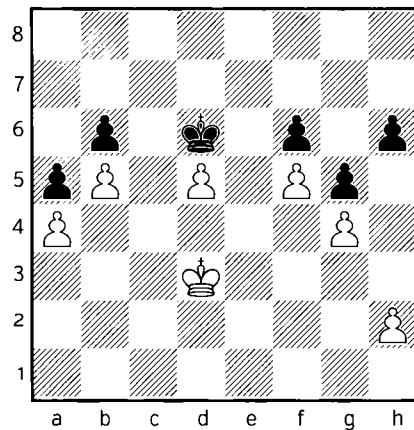
1... Kf7 2. Kh4 Kg6=

4.13. BREAKING THE FORTRESS / TEMPO

Sometimes, fortresses can be broken if the entrance is blocked by the opponent's king, but it can be set into zugzwang by spending the reserved tempi with the pawns.

1

PRACTICAL POSITION



It seems like another unbreakable fortress. The pawn structure and the king blocks all the entrances and White cannot realize his material advantage, however this is not true. White break through with

1. Ke4 Ke7 2.d6+!

Giving up the barrier!

2... Kxd6 3. Kd4

Setting Black into the first zugzwang. He has no reserved tempo left, he must retreat with his king.

3...♔e7 4.♔d5 ♔d7 5.h3!+-

Using the reserved tempo for setting Black into zugzwang again. White wins after ♔e6 or ♔c6 next move depending on what Black plays now.

The only entrance to Black's camp is through d5, but the king temporarily blocks the way. White has two tempi in reserver with his a-pawn. He can set Black into zugzwang twice to invade decisively

1.a3!

All tempi matters a lot, one should not waste them in pawn endgames.

1...♔e7 2.♔d5 ♔d7

Black blocks the way again to e6 or c6, but White spends his last reserved tempo by playing

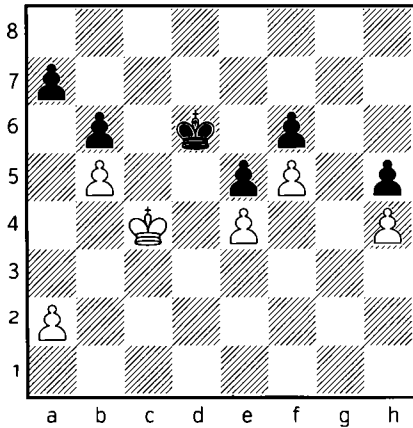
3.a4!

and wins.

3...♔e7 4.♔c6+-

2

PRACTICAL POSITION



8

7

6

5

4

3

2

1

a

b

c

d

e

f

g

h

CHAPTER 5

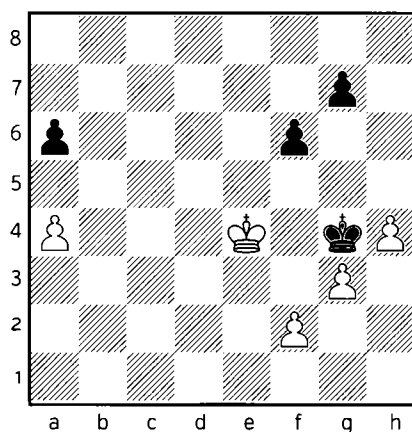
PRACTICAL GAMES

1

5.1. ACTIVE KING

This is a very important chapter from the practical point of view. In materially balanced positions, the side with more active king has more chances to win the game. (Of course, we speak about positions, when neither side has a passed pawn or some other triumph.) We study some practical games to understand what kind of motifs can be used to exploit the advantage. Actually with most of the ideas we have already met in the chapters before, just the upcoming ones are more complex because of the more pawns on board.

▷ TAN ZHONGYI
▶ T. ABRAHAMYAN
YINZHOU CUP, 2013



Despite White's extra pawn, the win is very difficult. We recommend to everyone to calculate such pawn end-games, because it seriously improves our calculating skills.

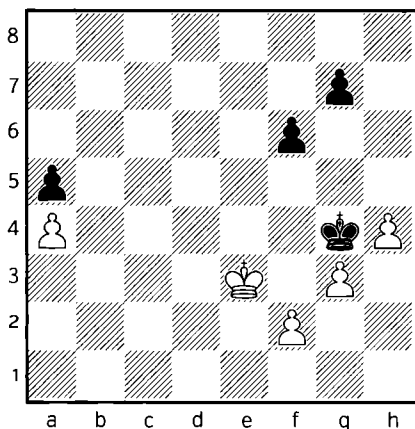
47...a5!

The only move for Black, otherwise White plays a5 and wins an impor-

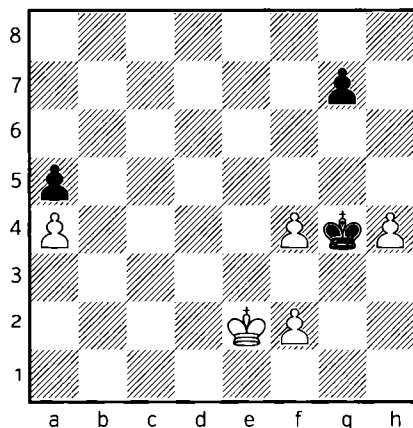
tant tempo for the pawn race after the king marches to the a6 pawn.

48.h5!!

A very difficult move and the only one which leads to a win. White gives back the pawn in order to obtain a superior king. 48.♔e3



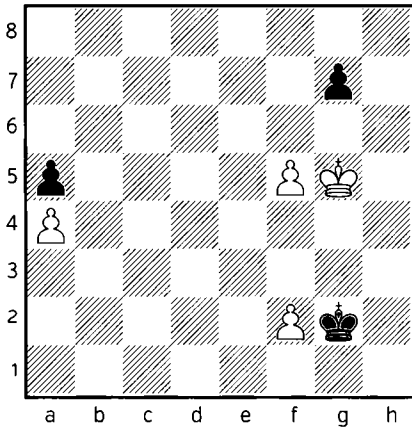
was very logical in order to keep controlling the f3 square and trying to squeeze back the black king by using zugzwang. However Black can play 48...f5! 49.♔e2 (49.♔d4 leads to draw after 49...♙f3 50.♔e5 ♙xf2 51.♔xf5 ♙xg3 52.h5 ♙h4 53.♔g6 ♙g4 54.♔xg7 ♙xh5 55.♔f6 ♙h6= The black king goes to a8.) 49...f4! 50.gxf4



50...♙xh4! This position is surprisingly a draw as we can see from the following lines. Black is always able to trade his g-pawn for both f-pawns and in the end he succeeds in running into to a8 corner. (50...♔xf4 loses after 51.♔d3 ♔g4 52.♔c4 ♔xh4 53.♔b5 White is too fast.)

A) 51.♔d3 ♔g4 52.♔e4 (52.♔c4 ♔xf4 53.♔b5 ♔f3 54.♔xa5 ♔xf2 55.♔b5 g5= The pawn race also leads to a draw.) 52...g6 52...♔h3 was also enough for a draw. 53.♔e5 (53.f3+ ♔g3 54.♔e3 ♔g2=) 53...♔f3 54.♔f6 ♔xf4 55.♔xg6 ♔f3 56.♔f5 ♔xf2 57.♔e4 White tries the shouldering, but it does not help this time. 57...♔g3! 58.♔d5 ♔f4 59.♔c6 ♔e5 60.♔b5 ♔d6 61.♔xa5 ♔c7=;

B) 51.♔f3 ♔h3 52.f5 ♔h2 53.♔f4 ♔g2 54.♔g5



White can start with all the different move orders here, but there is only one winning idea after all the moves.

51. ♖e6 ♜h6

51... ♜g8 52. ♖e7 will lead to the same.

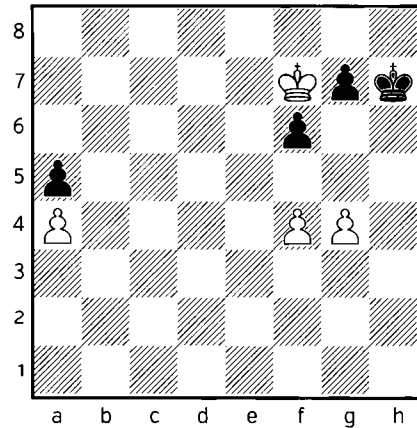
52. f4!

The black king must be kept squeezed.

52... ♜g6 53. ♖e7 ♜h6

On 53...f5 54.g5! ♜h5 55. ♖f7 ♜g4 56. ♜xg7 ♜xf4 57. ♖f6+- White promotes the pawn faster.

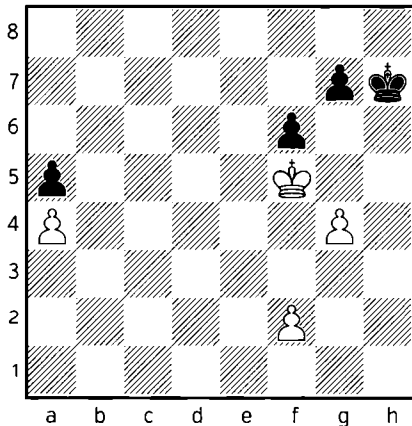
54. ♖f7 ♜h7



54... ♖f3! Black must catch the f5 pawn first. 55. ♜g6 ♖f4 56. ♜xg7 ♖xf5 57. ♖f7 seems to be completely winning at first sight, but Black is just in time: 57... ♖f4 58. ♖e6 ♖f3 59. ♖d5 ♖xf2 60. ♖c4 ♖e3 61. ♖b5 ♖d4 62. ♖xa5 ♖c5= The white king got squeezed to the a-file.

48. ♖d5 is not an option because of 48... ♖f3 49. ♖c5 (49. ♖e6 ♖xf2 50. ♖f7 ♖xg3 51. ♖xg7 f5 52. h5 f4 is a draw in the end.) 49... ♖xf2 50. ♖b5 ♖xg3 51. ♖xa5 f5 Only Black can win.

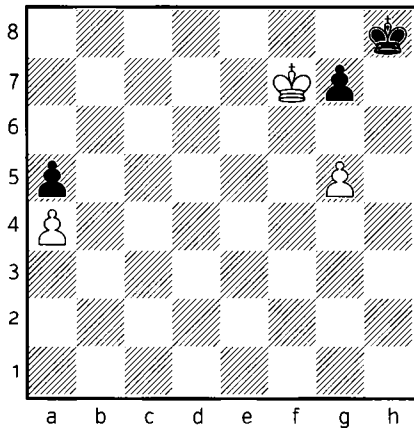
48... ♖xh5 49. ♖f5! ♜h6 50.g4 ♜h7



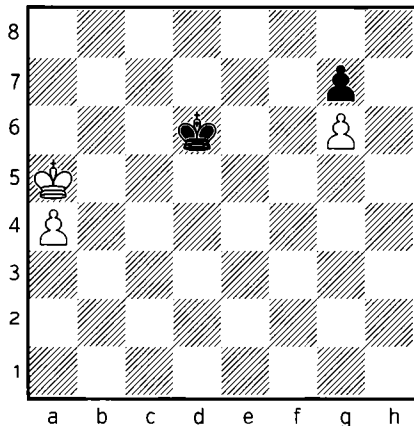
So far everything was easy after finding 48.h5, but here is the critical moment, where White makes a mistake in the calculation and fails to find the winning continuation.

55. ♖e6

55.g5! was the right move! 55...fxg5
(55...f5 56.♔e6 ♕g6 57.♔e5+-) 56.fxg5
♕h8



57.♕e6! ♕h7 58.♕f5! White wins
some important tempi by forcing the
black king to go back to the back rank.
58...♕g8 59.g6! ♕f8 60.♕e6! White
is able to hold the king on the back
rank! 60...♕e8 61.♕d6 ♕d8 62.♕c6
Only now Black can go for the g6
pawn, but it is already too late. 62...
♕e7 63.♕b6 ♕f6 (63...♕d6 64.♕xa5



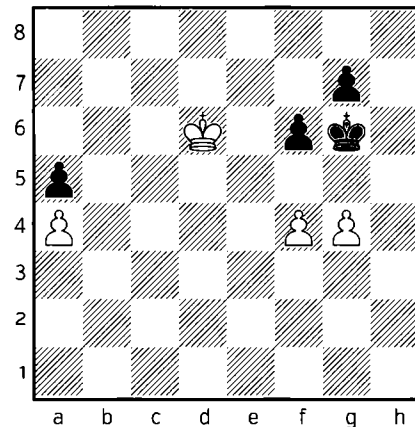
With the appearance of the g-pawns,
Black cannot hope to save himself by
squeezing the king to the a-file. 64...
♕c5 65.♕a6 ♕c6 66.a5 ♕c7 67.♕b5+-
White will go and take the g7 pawn.)
64.♕xa5 ♕xg6 65.♕b5 ♕f5 66.a5 g5
67.a6 g4 68.a7 g3 69.a8 ♚+-

55...♕h6 56.♕e7

56.♕d5 leads to the same draw as
in the game: 56...f5!! 57.gxf5 (57.g5+
transposes to the game.) 57...♕h5
58.♕c5 ♕g4 59.♕b6 ♕xf5 60.♕xa5
♕xf4 61.♕b5 g5 62.a5 g4 63.a6 g3=
Promoting at the same time.;

56.♕f7 White should have gone back
to the previous position.

56...♕g6 57.♕d6?



This is the decisive mistake.

It was not too late to go back to the
winning line with 57.♕e6!

57...f5!!

Black is out of the trouble.

58.g5 ♖h5 59.♗e5

On 59.♗e6 ♖g4 60.♗e5 Black has the important tempo 60...g6 and it leads to a draw after 61.♗f6 ♖xf4 62.♗xg6 ♗e4 63.♗h5 f4 64.g6 f3 65.g7 f2 66.g8♗ f1♗ =

59...♗g4 60.g6

White's last attempt and it indeed temporarily wins a pawn, but unfortunately after

60...♗h5 61.♗xf5 ♗h6!

White gets into zugzwang and must drop the g6 pawn.

62.♗e4 ♗xg6

Draw agreed. Pawn endgames can be very tricky sometimes.

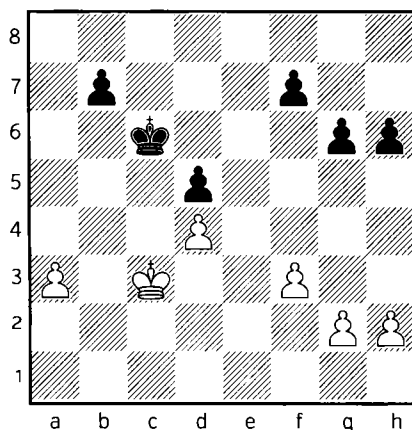
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2

▷ Y. PELLETIER

▷ A. VOLOKITIN

FRENCH LEAGUE, 2014



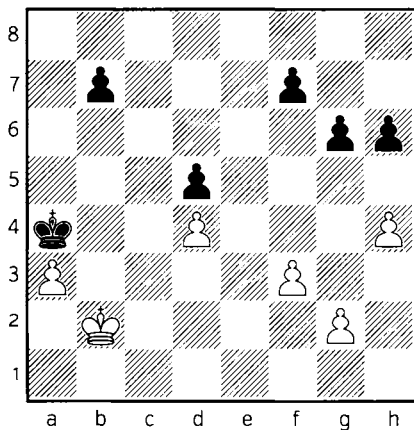
The following pawn endgame looks very drawish, but actually that is far from being true...Thanks to his more active king, Black wins.

39...♗b5

The first task is to activate the king as much as possible.

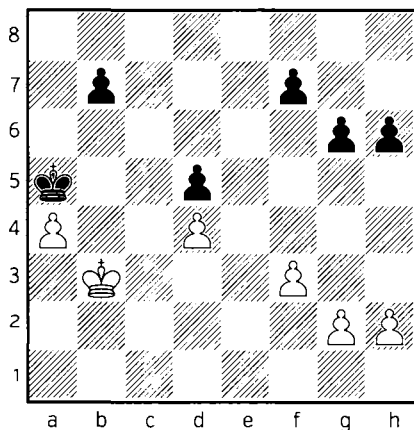
40.♗b3

White had to prevent ♗a4. Other moves, for instance 40.h4 were losing easily after 40...♗a4 41.♗b2



41...b5!-+ and b4 is coming next, opening the path towards the d4 pawn by the widening the space technique. Black inevitably wins the pawn and the game afterwards.

40...♔a5 41.a4



White wanted to prevent Black's plan of playing b5, with the idea that when White gets into zugzwang and he is forced to move with his king, Black plays ♕a4 and wins with b4, like it was pointed out in the 40.h4 line.

41.f4 could be met by 41...h5 42.g3 b5! 43.h3 f6! Every tempo plays an important role now. Black's task is to be the last one who makes his pawn move on the kingside to put his opponent into zugzwang. 44.h4 (44.g4 h4 45.f5 g5-+ leads to the same.) 44...f5 and White is forced to move with his king, but it allows 45.♕b2 ♕a4 46.♕a2 b4 47.axb4 ♕xb4 48.♕b2 ♕c4-+

41...f6

Actually 41...g5 and 41... h5 were equally good. The only important thing was to preserve the decisive b7-b6 tempo until the last moment. Black wins with the same motif in all the lines, but let's check all the possibilities. The key is that the kingside is going to be locked after both sides make their available pawn moves and the outcome of the battle will be decided on the queenside. Black should play b5 in the moment when the white king stands on b3 in order to win the fight for the opposition. Therefore, when the white king goes to a3, Black must have the relevant tempo of playing b6 and only after ♕b3 b5. But this only comes at the last stage, first all tempi must be spent on the kingside...

42.♕a3

42.f4 h5 43.g3 g5 43...f5 would have been a huge mistake as it would have left White with two more tempi with his h-pawn... 44.f5 g4 45.♕a3 and here comes the breakthrough, as there are no more moves left on the kingside.

Black must play b5 when the king is on b3, therefore he now plays 45... b6! 46.♖b3 b5! 47.axb5 ♜xb5 48.♙c3 ♙a4-+ squeezing out the king and collecting the d4 pawn.;

42.g4 loses to 42...h5 43.♙a3 (43.gxh5 gxh5 44.♙a3 h4 45.♙b3 h3 46.♙a3 the kingside is basically locked, because f4 can be met by f5, therefore it is time to execute the winning plan: 46... b6! 47.♙b3 b5 48.axb5 ♜xb5 49.♙c3 ♙a4-+) 43...h4 44.h3 g5 45.♙b3 Now the king is on b3, so the b6 tempo should not be spent. 45...b5! 46.axb5 ♜xb5 47.♙c3 ♙a4-+;

42.h4 h5

A) 43.g3 g5 44.♙a3 (44.hxg5 fxg5 45.f4 The pawns would be promoted in the same time, but there is one big difference that the black king is still in the square of the f-pawn... 45...gxf4 46.gxf4 ♙b6! 47.f5 ♙c6-+ and the h-pawn cannot be stopped.) 44...gxh4 45.gxh4 b6! 46.♙b3 b5 47.axb5 ♜xb5 48.♙c3 ♙a4-+;

B) 43.g4 If Black calculates well, he sees that White does not have any more tempo on the kingside, so he can play 43...b5 44.axb5 ♜xb5 45.gxh5 gxh5 46.f4 f5 47.♙c3 ♙a4-+

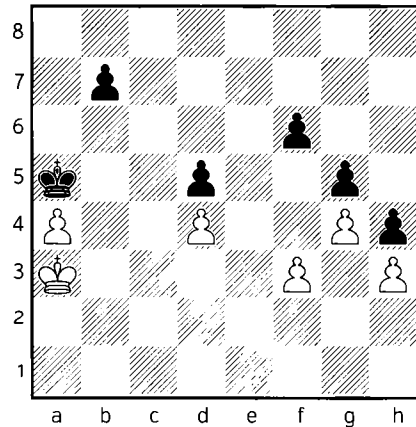
42...h5

Black wins with the same motifs like it was demonstrated in the lines above.

43.g3 g5 44.g4

44.h3 makes no difference. 44... h4 45.gxh4 (45.g4 transposes to the game.) 45...gxh4 46.♙b3 b5 47.axb5 ♜xb5-+

44...h4 45.h3



45...b6!

As we already know, Black plays b5 only when the white king goes to b3 to win the fight for the opposition.

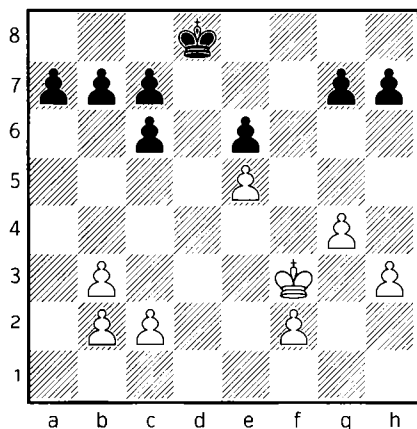
46.♙b3 b5! 47.axb5 ♜xb5

White resigned in view of 47...♜xb5 48.♙c3 ♙a4! Outflanking! Black wins the d4 pawn automatically. 49.♙d3 ♙b3 50.♙d2 ♙c4 51.♙e3 ♙c3 Black has squeezed out the king move by move and he has the tempo of ♙c4-c3 forever to finally collect the d4 pawn. 52.f4 ♙c4 53.f5 ♙c3-+ An instructive endgame.

0-1

3

▷ G. KAMSKY
 ▶ K. PRIYADHARSHAN
 WORLD OPEN, 2014



We have reached a typical Berlin pawn endgame. When Black plays for a draw and aims for simplifications at any cost, he might end up in this lost pawn endgame. The point is the following, White has 4 vs 3 pawns on the kingside and he can easily create a passed pawn with $f4-f5$, while on the other side, Black has 4 vs 3 too, but due to the doubled c-pawns he is unable to create a passed pawn. The only chance for Black is to create a fortress somehow, but as we will see, he is unable to do it successfully. This factor decides the outcome of the game. Kamsky's technique is very instructive.

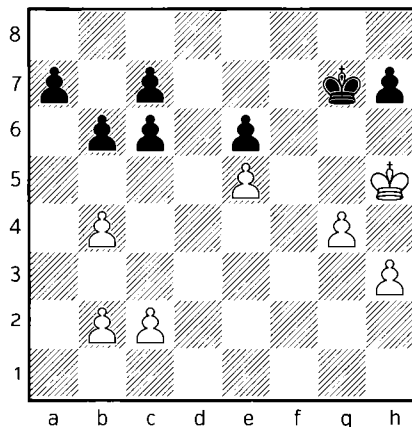
27.b4!

This is a strong positional move, to fix the black pawns on the queenside. At

the later stage, when the time comes to break through on the kingside, all tempi will be very important. White has time to take these prophylactic measures before starting his own plans, because Black cannot do anything anyway.

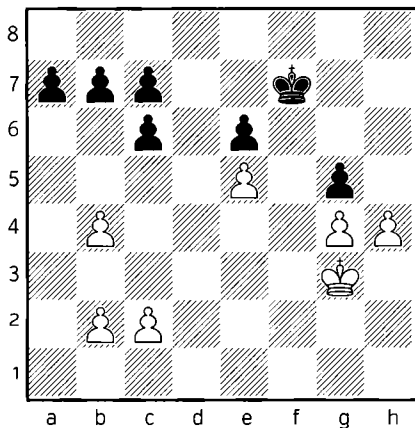
27...♔e7

27...g5 does not prevent White from creating a passed pawn. White would continue with 28.♖g3 ♕e7 29.f4! h6 This is the best chance to try and keep the kingside closed, but White manages to invade with his king anyway... (29...gxf4+ 30.♖xf4 ♖f7 loses easily to 31.♖g5 ♖g7 32.♖h5 b6

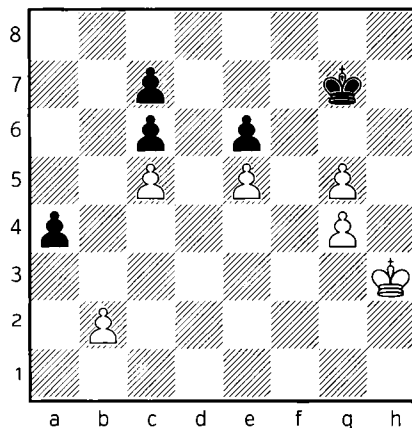


33.g5+- Black soon runs out of tempi, he will be forced to move with his king, but then ♖h6 followed by g6 wins, because White gets access to the e6 pawn.) 30.h4 ♖f7 (30...gxf4+ 31.♖xf4 ♖f7 loses easily again. This time, White does not have ♖g5-h6, but he wins after 32.h5! ♖g7 33.g5 b6 34.gxh6+ ♖xh6 35.♖g4+- Again with the same method. Black soon gets

into zugzwang and when he moves with his king, ♔g5-f6 will decide the game.) 31.fxg5 hxg5

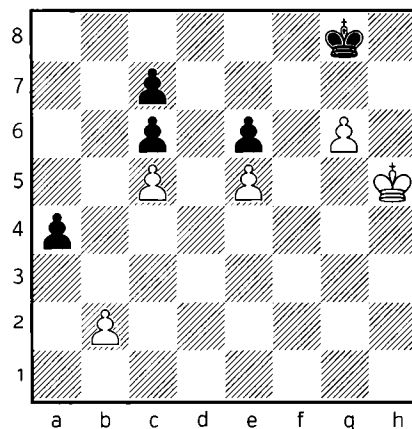


32.hxg5! looks like a dubious decision at first sight, but actually White must open a way for his own king to invade on the kingside. 32...♖g6 33.♖h4 b6 34.c4 It is time to spend all the tempi on the queenside for both sides and then the king manoeuvres with zugzwang part begins... 34...a5 35.bxa5 bxa5 36.c5 a4 White is the first who gets into zugzwang, otherwise if he could have played ♖h5 and g6, then it would have been over immediately. However, losing one of the g-pawn does not change anything, White wins after 37.♖h3 ♖g7



A tricky attempt to keep a fortress.

(37...♖xg5 38.♖g3 ♖h6 39.♖h4 ♖g6 40.g5 ♖f5 Other moves transpose to the 37...♖g7 line. 41.♖h5 ♖xe5 42.g6 ♖f6 43.♖h6+)-) 38.g6! This is the only way to break through. Otherwise Black waits with his king on h7-g7 and when White goes ♖h4, Black replies with ♖g6. 38...♖xg6 39.♖h4 ♖h6 40.g5+ ♖g6 41.♖g4 ♖f7 42.♖h5 ♖g7 43.g6 ♖g8



This is a very important position! We can use this motif in many pawn

endgames. White wins by a triangulation, giving the tempo to his opponent... 44. ♖h4! Or 44. ♖g4 is also good with the same idea. (White should not fall into the trap with 44. ♖h6 ♖h8 45.g7+?? ♖g8 46. ♖g6 a3 leads to stalemate!) 44... ♖h8 (44... ♖g7 45. ♖g5+- is over as White invades on f6!) 45. ♖g4! ♖g8 46. ♖h5! The triangulation is done! Black cannot play ♖g7 in view of ♖g5 and zugzwang and after 46... ♖h8 47. ♖h6! ♖g8 48.g7+- there is no stalemate anymore. Black must play ♖f7, but then ♖h7 wins.

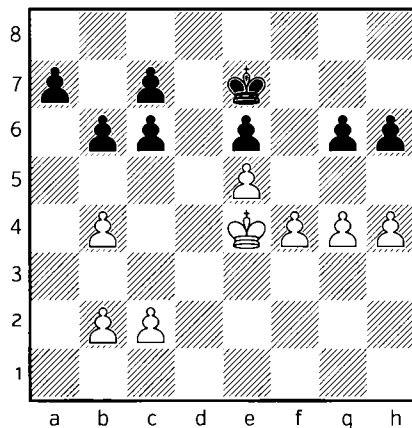
28.h4

Kamsky improves the circumstances before executing the plan of f4-f5.

28...g6

If Black decides to go for a waiting policy with 28... ♖f7 29. ♖e4 ♖e7 30.f4 ♖f7 31.f5 ♖e7 32. ♖f4 ♖f7 White wins after 33. ♖g5 ♖e7 (33... h6+ creates a hole on g6. 34. ♖h5+- Black soon runs out of tempi again and then ♖g6 wins.) 34.h5! ♖f7 35.h6!+- and the king invades.

29. ♖e4 h6 30.f4 b6



31.f5!

The time has come for the final break. It is important to mention that White saves all his tempi on the queenside for the later stage of the game, when he needs to set Black into the final zugzwang.

31...g5

This is the only chance to temporarily keep the white king away from the camp, but it does not help either... 31...gxf5+ 32.gxf5 ♖f7 33.fxe6+ ♖xe6 34.h5+- wins easily. Black soon needs to move with this king and then ♖f5 wins. White does not even need his tempi here, because ♖f4-e4 is another way to set Black into zugzwang.

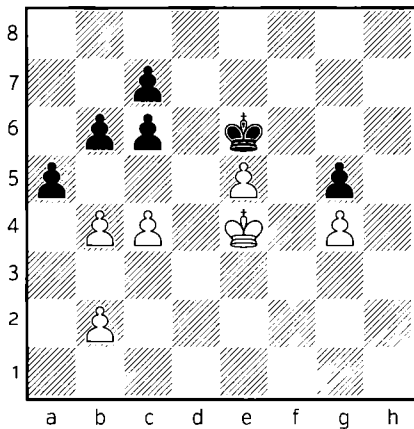
32.hxg5 hxg5 33.fxe6! ♖xe6

This is the moment when perfect calculation is required. White must count how to spend the pawn moves to set Black into zugzwang and let his king invade on f5.

34.c4!

Black loses after all the moves:

34...a5



34...a6 is met by 35.c5! bxc5 (35...b5 36.b3+-) 36.bxc5 a5 37.b3+-;

34...c5 35.b5+-;

34...b5 35.c5! a6 36.b3!+- in all lines Black gets into zugzwang and ♔f5 wins next.

35.b5!!

The last accuracy! 35.bxa5 spoils the win, because after 35...bxa5 36.c5 a4 it is White who gets into zugzwang... 37.♔d4 ♔f7=

35...cxb5

35...c5 36.b3+-

36.cxb5 a4

White is in zugzwang again, but the huge difference to the 35.bxa5 line is that White has gained another invading square for his king, now he can enter to the black camp through d5!

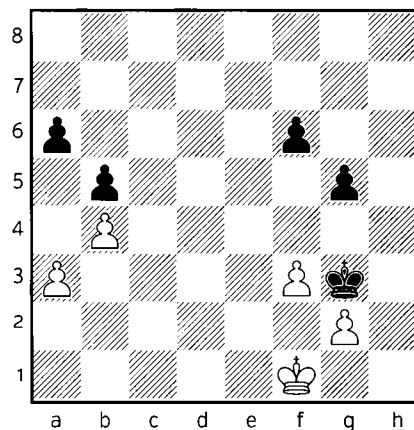
37.♔d4! ♔e7 38.♔d5 ♔d7 39.e6+ ♔e7 40.♔e5

Black resigned! An instructive end-game and a flawless technique by Kamsky!

1-0

4

▷ T. HILLARP PERSSON
 ▶ M. RAGGER
 POLITIKEN CUP, 2015



We might think that pawn endgames are very easy, but as we will see they are difficult even for good grandmasters. It is clear that Black has the upper hand in this position because his

king is more active, but the question is if it is enough to win the game?! White only waits with ♖g1-f1 and Black has different attempts to seize the initiative...

41...f5

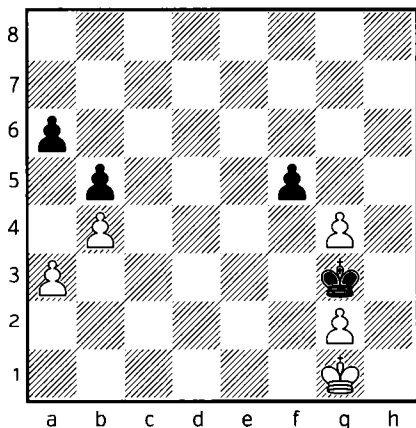
This move perfectly serves all attempts of making progress. Sooner or later Black had to play this move.

42. ♖g1 g4

Running to the queenside with 42... ♖f4 also fails because White is in time to block the king with 43. ♖f2 ♖e5 44. ♖e3 ♖d5 45. ♖d3 f4 White gets into zugzwang, but the good position of the f3 pawn prevents the black's king penetration back on the kingside. 46. ♖c3! =;

42...f4 43. ♖f1 ♖h2 brings nothing because White simply waits with 44. ♖f2 ♖h1 45. ♖f1 =

43. fxg4



43... ♖xg4

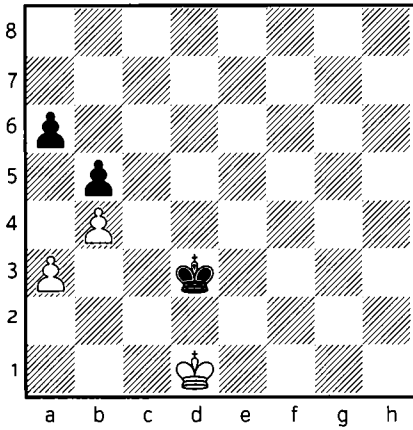
This is in general the winning method. Black temporarily gives up the activity of his king, but thanks to a zugzwang, it soon goes back to g3, followed by advancing the f-pawn, which opens the path towards the a3-b4 pawns... 43...fxg4 44. ♖f1 ♖h2?? with the idea of pushing g3, but of course White plays 45. ♖f2! first and suddenly Black is in trouble.

44. ♖f2 f4

White resigned here! An amazing story, because the game is drawn! Hillarp Persson was sure that Black plays ♖g3 and f3 and collects the a3-b4 pawns with his king, but he forgot about a saving motif! 44...f4 45. ♖g1

A) Keeping the queenside pawns on the board also fails because after 45... ♖f5 46. ♖f2 ♖e4 47. ♖e2 ♖d4 48. ♖f3 Black must turn back with 48... ♖e5 = and make a draw. (Because White wins the pawn race after 48... ♖c3?? 49. ♖xf4 ♖b3 50. g4 ♖xa3 51. g5+-);

B) 45... ♖g3 46. ♖f1 f3 47. gxf3 ♖xf3 48. ♖e1 ♖e3 49. ♖d1 ♖d3

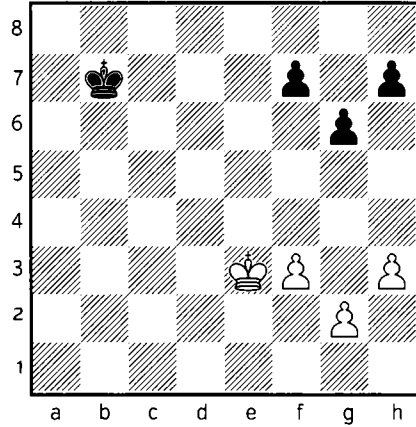


It seems to be over, but actually White saves the game with 50.a4!! using the fact that the number of the a-pawns does not matter if the white king reaches the corner. 50...bxa4 (50...♔c3 51.axb5 axb5 52.♔c1 ♖xb4 53.♔b2!= White holds the opposition and the draw!) 51.♔c1 ♔c3 52.♔b1 ♔xb4 53.♔a2=

0-1

5

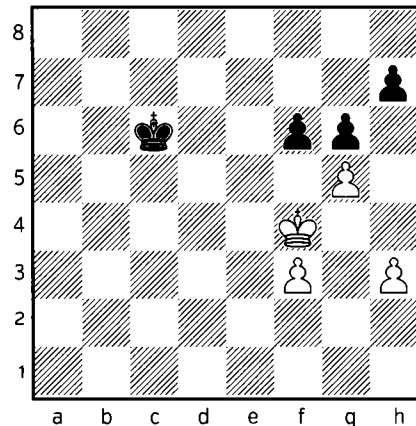
▷ E. SHVIDLER
 ▶ F. MAESER
 LENK LENK, 1991



A very instructive endgame with many important motifs and positions.

42.♔e4!

42.♔d4 leads to the same as the game, but 42.♔f4? trying to break in through g5, spoils the win 42...f6! 43.g4 ♔c6 44.g5

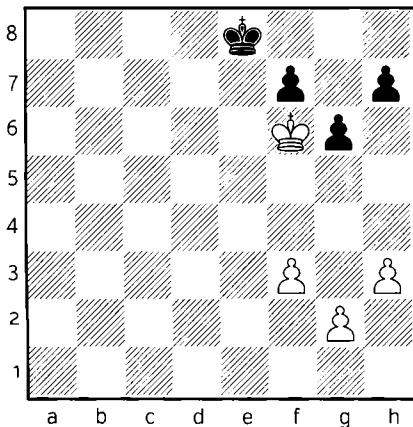


this would have been the point, but Black survives after 44...♔d6! 45.gxf6 h6!= Black successfully blocked the king's route and he takes the f6 pawn soon.

42...♖c6

42...f6 makes no sense now obviously
43.♕d5+-

43.♖e5 ♔d7 44.♖f6 ♕e8



White has only one plan to win, but it very useful to understand why allowing the black king to f8-g8 leads to draw. Such endgame might easily arise from a practical game.

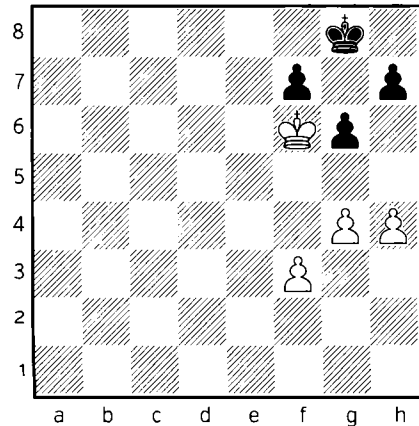
45.g4?

White has to provoke the h7-h5 weakening, otherwise the game is drawn after ♖f8-g8. 45.♖g7! h5 46.♖f6 ♖f8 The point of forcing the pawn to h5 is to weaken the g6 pawn. White suddenly has the plan of playing f4-f5, which already must be taken, but

then ♖xf5 followed by ♖g5-h5 wins. White can execute this plan in different versions. Let's say 47.h4 ♖g8 48.f4 ♖f8 49.f5 gxf5 50.♖xf5 ♖g7 51.♖g5+-

45...♖f8 46.h4 h6?

Giving back the favor. Black should have unnecessarily weakened his own pawn structure. He should have just wait with 46...♖g8!

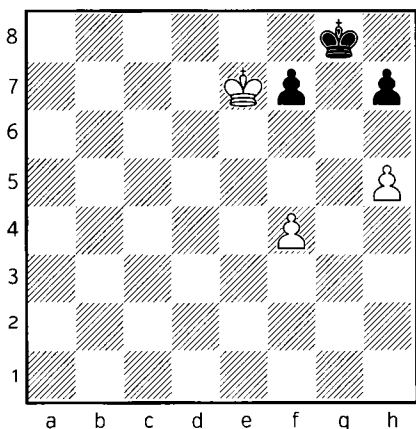


and the game is drawn, but let's understand the reasons by continuing some winning attempts. Black's task is actually very easy, he only needs to wait with ♖f8-g8.

A) If White tries 47.♖e7 ♖g7 48.f4 with the idea of pushing f5 and then f6, followed by winning the f7 pawn. Black must find the only move 48...f5! 49.gxf5 gxf5 50.♖e6 ♖g6 51.♖e5 Black loses the f5 pawn, but we have reach the theoretical endgame, that we have already studied with the f- and h-pawn against the h7. We have to remember, that Black should play ♖f7 or ♖e7 according to where the

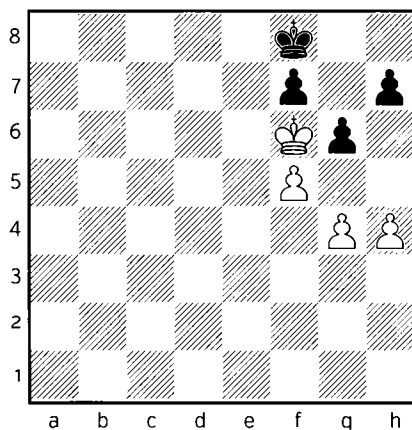
h-pawn is. Now it is on h4, therefore the draw is 51...♔f7! Only move! (51...♔g7? 52.♔xf5 ♔f7 was losing to 53.h5 ♔e7 54.♔e5 ♔f7 55.♔d6! ♔f6 56.h6!+- as we already studied.) 52.♔xf5 ♔e7! = With a theoretical draw. Please see the explanations in the mentioned chapter.;

B) 47.h5 gxh5 48.gxh5 ♔f8 49.f4 (49.h6 when the pawn gets to h6, we must count with the stalemate with the king in the corner. 49...♔g8 50.♔e7 ♔h8 = and just ♔g8-h8 until the end of the game.) 49...♔g8 50.♔e7



50...f5! (50...♔g7? loses to 51.f5+- there is no stalemate and White wins after f6.) 51.♔f6 ♔f8 52.♔xf5 and again we have reached the same endgame as in the 47.♔e7 line, just with the pawn on h5. The right move now is 52...♔f7! =;

C) 47.f4 ♔f8! 48.f5



If White first advances his pawn to f5 to avoid Black's saving trick with f5. He wants to win now with ♔e7 after ♔g8, but suddenly Black has a concrete way to draw. 48...h5! 49.g5 gxh5 50.♔xf5 ♔g7 =

47.f4! ♔g8 48.h5 gxh5 49.gxh5 ♔f8 50.f5

There is no stalemate with the black pawn on h6. White simple wins in both lines.

50...♔e8

50...♔g8 51.♔e7 ♔g7 52.f6+ ♔g8 53.♔e8+-

51.♔g7 ♔e7 52.♔xh6 ♔f6 53.♔h7+-

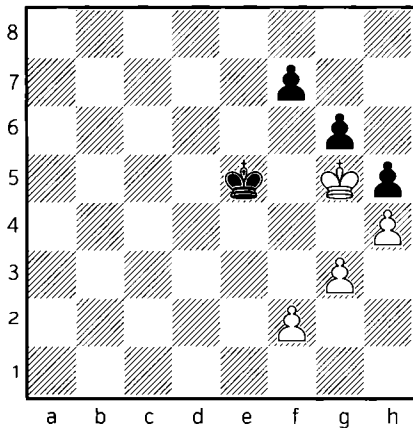
Black resigned as the h-pawn promotes faster. A great endgame which also shows, why it is important to know as many theoretical positions as possible. It is possible to learn these ideas, but to find them over the board after 5-6 hours of play, being

exhausted and possibly in timetrouble is quite impossible.

1-0

6

▷ V. KORTSCHNOJ
▶ A. LUKIN
RILTON CUP, 2004



Slightly different edition of the previous example, but it does not change outcome and the winning technique. Having the pawn on h5 weakens the g6 pawn, which can be undermined by f4-f5 in the right moment.

1.f3!

To avoid f4-♔e4.

1...♔e6

And now: 1...♔d4 fails by one tempo. 2.♔f6 ♔e3 3.♔xf7 ♔xf3 4.♔xg6 ♔xg3 5.♔xh5 ♔f4 6.♔g6+-

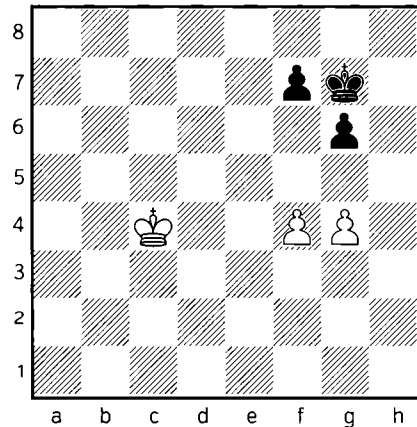
2.f4!

Black resigned in view of 2.f4 ♔e7 3.f5 gxf5 4.♔xf5+- followed by winning the h5 pawn.

1-0

7

M. BOTVINNIK
1946



The great Champion has created some studies to show that 2 against 2 pawns in front of each other can be very difficult, if there is big difference between the king's activity. White is winning after

1.♔d5 ♔f8

1...♔f6 2.♖d6 ♘g7 3.♙e7 ♘g8 The direct f5 could be met by gxf5 gxf5 and ♘g7. However if it was Black's move he would find himself in zugzwang as ♘g7 is already met by f5! gxf5 gxf5 and ♘g8 f6 wins. Therefore the task is easy, White needs to pass to move to his opponent and he can achieve it by a triangulation! 4.♖d8!

4.♖c7!

But not 4.f6 because after 4...♖d8 5.♙e5 ♖d7 6.♖f5 ♖d6 7.♘g5 ♙e5= Black wins the f6 pawn.

4...♙e7 5.♖c8

Going behind the pawns!

A) 4...♖f8 5.f5 gxf5 6.gxf5 ♘g7 7.♙e7+-

5...♖d6

B) 4...♘g7 5.♙e8! It is very interesting, if Black goes

5...♙e8 6.f6+-

B1) 5...♖g8 6.f5 ♘g7 7.♙e7 and White got the winning construction! 7...gxf5 8.gxf5 ♘g8 (8...f6 9.♙e6+-) 9.f6+-;

6.♖d8 ♙e5 7.♙e7 ♖f4 8.♘xf7 ♘xg4 9.♙e6+-

White is faster.

B2) 5...♖f6 we get the ideal position, just with reversed king after 6.♖f8! The going behind technique! 6...♙e6 7.♘g7 ♙e7 8.f5! gxf5 9.gxf5+-;

C) 4...♙h7 5.♖d7! ♘g7 (Or 5...♖g8 6.♙e7+-) 6.♙e8 ♘g8 7.f5 gxf5 8.gxf5 ♘g7 9.♙e7+-;

1...f5 loses to 2.g5 and White automatically wins the g6 pawn.

2.♖d6 ♙e8 3.f5!

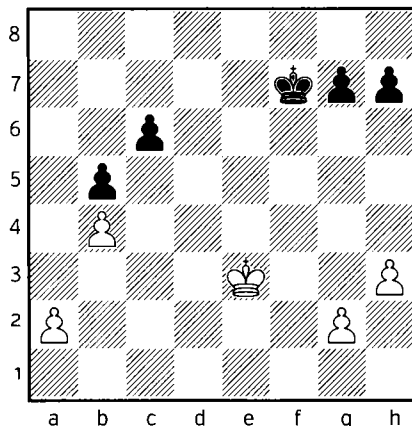
No other way to make progress, but this is good enough.

3...g5

3...gxf5 4.gxf5 ♖d8 5.f6! Black is in zugzwang and he loses after outflanking. 5...♙e8 6.♖c7 ♖f8 7.♖d8 ♘g8 8.♙e7+-

8

▷ E. ROZENTALIS
 ▶ P. JARACZ
 POLISH LEAGUE, 2012



The following endgame is extremely complex, but it is very instructive to analyse to learn new ideas. The material is balanced, but White has the more active king.

35. ♖d4 ♖e6 36. ♖c5 ♖d7

We have reached a critical position. White is winning and it would have been possible to find the solution with some logical thinking. White's only plan to make progress is to get his king behind the c-pawn with the help of zugzwang. White should play ♖b6, and on ♖d6 ♖b7 ♖d7, a3 puts Black in zugzwang. Black is forced to play ♖d6, which is met with ♖c8 ♖d5 ♖c7. The game will be forced to continue with c5 bxc5 ♖xc5 and ♖b7, and here again, Black will be forced to push b4, clearing completely the queenside, after which a race to collect the kingside pawns will begin. When we have foreseen this, we must think about how to improve our chances in the final stage of the game: the race to the kingside. If we reach this point, we easily come to the conclusion that both sides should aim to advance their pawns on the kingside before the action on the queenside begins...

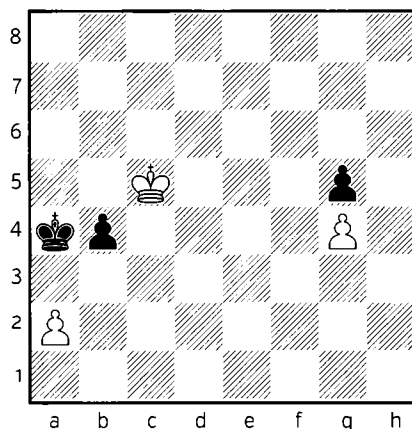
37. ♖b6??

White is the first one who fails... 37.h4! +- was the winning move. All of Black's possible reactions will be discussed after 38.h4.

37... ♖d6??

Black gives back the chance, but from now on, White plays perfectly... 37... g5! was the right move, as it was explained above. 38. ♖b7 ♖d6 39. ♖c8 (39.g4 ♖d7 40.a3 h6 = The same story as after 39.a3.; 39.a3 would spoil White's extra tempo, and there will be no zugzwang anymore... 39... ♖d7 40.g3 h5=) 39...c5 40.bxc5+ ♖xc5 41. ♖c7 Now Black can reach a draw in different ways. One of them is 41... b4 keeping the decision open regarding which direction should the king take. 42.g3 h5 43.g4 hxg4 44.hxg4

A) However 44... ♖b5? loses very destructively. 45. ♖d6 ♖a4 46. ♖c5



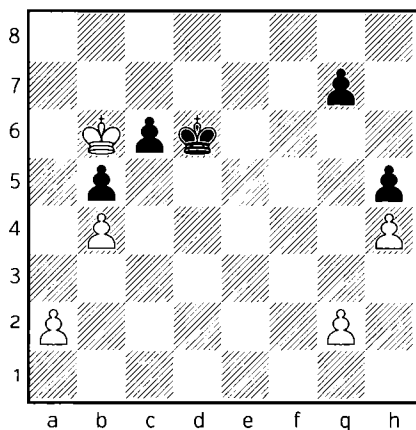
46... ♖a5 Black seems to control the situation, but White can set him into zugzwang by triangulation. (46... ♖a3 47. ♖b5+- is over.) 47. ♖d4! ♖a4 (47... ♖b5 48. ♖d5 will be the same.) 48. ♖c4! ♖a5 49. ♖c5! ♖a4 50. ♖b6! ♖a3 51. ♖b5+- White successfully finished his plan. ,+- is over.;

B) 44...♔d5! is the right direction.
 45.♙b6 ♚e4 46.♙c5 ♙f4 47.♙xb4
 ♙xg4 48.a4 ♙f4= The pawns pro-
 mote at the same time.

38.h4!

White has found the right idea! From now on he has a very easy task. The winning method is the same in all the variations!

38...h5

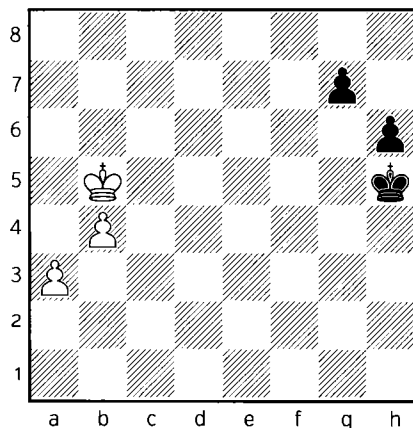


It's time for White to execute the winning method again, but the move order is really important! 38...♙d7 39.g4! ♔d6 40.g5 advancing the pawns as far as possible. 40...♙d7 41.h5 ♔d6 and now White can execute the usual plan: 42.♙b7 ♙d7 43.a3 ♙d6 44.♙c8 ♙e5 45.♙d7 ♙f5 46.♙xc6 ♙xg5 47.♙xb5 ♙xh5 48.♙c4! g5 White wins because his king is close enough to catch the g-pawn, while the Black one is too far away from the b-pawn. 49.♙d3 ♙g4 50.b5 ♙h3 51.b6 g4 52.b7 +-) 41.a3 ♙d7 42.♙b7 ♙d6 43.♙c8 c5

44.bxc5+ ♙xc5 45.♙c7 ♙c4 46.♙c6+- White wins,;

38...g6 is met with 39.g4! h6 40.g5! Black has two choices, but both of them lead to the same result. 40...hxg5 (40...h5 41.a3 ♙d7 42.♙b7 ♙d6 43.♙c8 c5 44.bxc5+ ♙xc5 45.♙c7 ♙c4 46.♙c6 White wins.) 41.hxg5 ♙d7 42.♙b7 ♙d6 43.♙c8! (43.a3? ♙d7) 43...♙e6 (43...c5 44.bxc5+ ♙xc5 45.♙d7 ♙b4 46.♙d6+- is hopeless.) 44.♙c7 ♙f5 45.♙xc6 ♙xg5 46.♙xb5 ♙f5 (46...♙h4 47.a4+- White queens first and he can exchange the queens with ♖h8 and ♗g8 at the end.) 47.♙c4 The White king catches the g-pawn. 47...g5 48.♙d3 ♙f4 49.b5+- and b8♗ arrives with check,;

38...h6 is the worst, because after 39.h5 White preserves 3 extra tempi for the following fight. 39...♙d7 40.a3 ♙d6 41.g4 This is not necessary, but wins easily. 41...♙d7 42.♙b7 ♙d6 43.♙c8 ♙e5 Black loses by one tempo. (43...c5 44.bxc5+ ♙xc5 45.♙c7 ♙c4 46.♙c6+- with the usual win.) 44.♙c7 ♙f4 45.♙xc6 ♙xg4 46.♙xb5 ♙xh5



The pawns seem to promote at the same time, but White has a well-known and instructive winning method: 47.♖c4 g5 48.b5 g4 49.♖d3! The White king threatens to catch the pawn. Black is forced to support it with his king. 49...♖h4 50.b6 g3 51.♖e3 Black must use his king again. 51...♖h3 52.b7 g2 53.♖f2! and after 53...♖h2 White promotes with check. 54.b8♚+ +-

39.a3!

This is the only way to win. 39.♖b7? with the same plan would spoil the win, because of 39...c5 ! 40.bxc5+ ♖xc5 41.♖c7 (41.a3 is not the same anymore. 41...b4 42.axb4+ ♖xb4 Black is a tempo ahead in comparison to the game, which is enough to save the game. 43.♖c6 ♖c4 44.♖d6 ♖d4 45.♖e6 ♖e4 46.♖f7 ♖f4 47.♖xg7 ♖g4=) 41...b4! 42.♖d7 ♖b5 43.♖d6 ♖a4 44.♖c5 ♖a3 45.♖b5 ♖xa2 46.♖xb4 and the race ends with a draw. 46...♖b2 47.♖c4 ♖c2 48.♖d4 ♖d2 49.♖e4 ♖e2 50.♖f4 ♖f2=

39...♖d7 40.♖b7 ♖d6

40...g6 does not change much after 41.g3+-

41.♖c8

Everything is easy and forced from now on...

41...♖e5 42.♖c7 ♖d5

42...♖f4 is very slow now. 43.♖xc6 ♖g4 44.♖xb5 ♖xh4 45.a4 ♖g3 46.a5+-

43.♖d7 c5 44.bxc5 ♖xc5 45.♖c7 ♖c4 46.♖c6 b4 47.axb4 ♖xb4 48.♖d5 ♖c3 49.♖e6 ♖d3 50.♖f7 ♖e3 51.♖xg7 ♖f4

51...♖f2 52.♖g6 ♖xg2 53.♖xh5+-

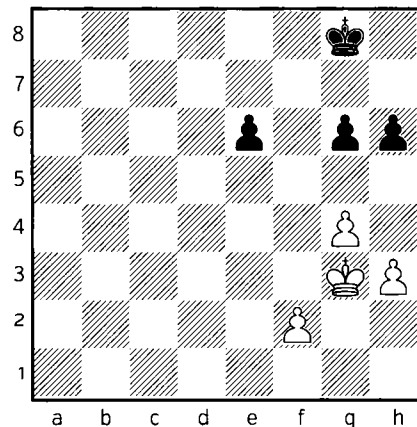
52.♖g6

And Black resigned in view of 52.♖g6 ♖g4 53.g3! +- The final subtlety!

1-0

9

▷ C. SANDIPAN
▶ R. FRISCHMANN
EUROPEAN CLUB CUP, 2014



44.♖f4

Such endgames could be easily winning sometimes. White has the more active king and the better pawn structure.

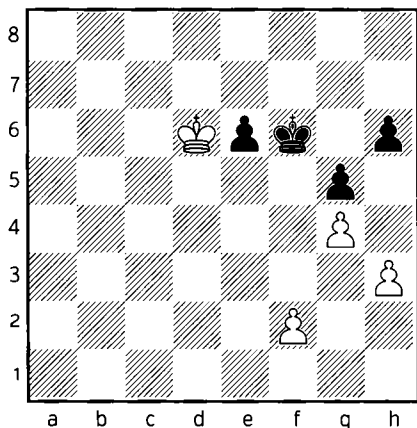
44...g5!

The only move to hold! It is very important to fix the pawns on h3 and f2 or f3 to avoid getting into zugzwang by using these tempi with the pawns. We can see the importance of the 44...g5 move in the 44...♔f7 line. Black might get into trouble after 45.h4! ♔f6 46.g5+ hxg5+ 47.hxg5+ ♔f7 48.♕e5 ♕e7 49.f4+- and ♔f6 or ♔d6 wins next.

45.♕e5 ♔f7 46.♔d6

The only move to continue playing for the win. 46.f3 ♕e7 is an easy draw.

46...♔f6



47.♔c7??

After this terrible blunder, White is losing. Sandipan was playing for some

kind of zugzwang and he clearly miscalculated something... The game was drawn after 47.♔d7 ♕f7 48.f3 with the idea to set Black into zugzwang and invade with the king, but Black holds after 48...♔f6 49.♔d6 White must retreat. (Because 49.♕e8? loses to 49...♕e5 50.♕f7 ♕f4 and Black is faster.) 49...♔f7=

47...♕e5!

The point of ♔c7 was to meet 47...♕e7? with 48.♔c6 ♔f6 49.♔d6 ♕f7 50.♔d7 ♔f6 51.♕e8 and in comparison to the 47.♔d7 line, the pawn is still on f2 which turns out to be a decisive tempo. 51...♕e5 52.♕e7 ♔f4 53.♕xe6 ♕f3 54.♕f5 ♕xf2 55.♕g6+- This time White grabs the pawns first.

48.♔d7 ♔d5!

Probably White forgot about this move in his previous calculations. Black advances his pawn to e5 first and only then he goes for the f2 pawn. This wins a significant tempo!

49.♕e7 e5! 50.♔f6 ♕e4 51.♕g6

51.♕e6 does not change anything, Black wins after 51...♔f3 52.♕xe5 ♕xf2 53.♕f5 ♕g3+-

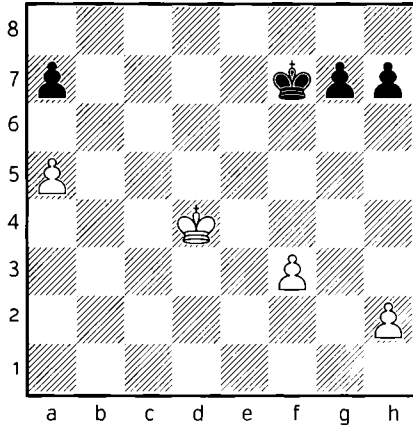
51...♔f3 52.♕xh6 ♕xf2 53.♕xg5 e4

And Black is faster!

54.♔f6 e3 55.g5 e2 56.g6 e1♚ 57.g7 ♚e8-+ 0-1

10

▷ S. SJUGIROV
 ▶ C. LUPULESCU
 EUROPEAN CHAMPIONSHIP,
 2015



This kind of pawn endgames require poor calculations. Black has numerous ways to continue the game, but some of them lead to a draw and some are losing. Surprisingly the Romanian GM fails to save the game...

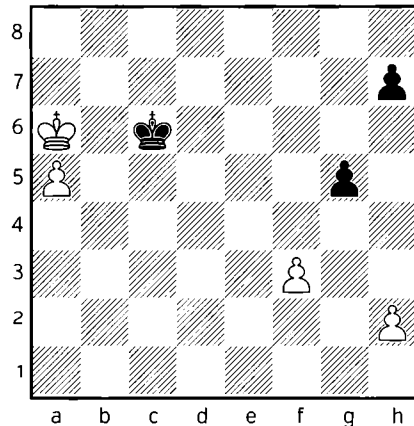
42... ♔e6

Naturally, Black brings his king closer.

43. ♔c5 ♕d7?!

The first inaccuracy, although the game remains a draw. Black has blocked the way to the a7 pawn and he is in time to protect it against ♕b5-a6 with ♕c7-b8, but a serious drawback is that he gave up the d5 square from where White can decide later

to go towards the queenside or the kingside... The easiest draw was 43... g5 44. ♕c6 and basically all moves are leading to a draw now. The point is that when the white king collects the a-pawn, the black king must squeeze it to the corner from where it cannot escape... One possible move is 44...a6 45. ♕b6 ♕d6 46. ♔xa6 ♕c6!



Locking the king to the a-file from where it cannot escape, therefore the draw is inevitable... 47. ♕a7 ♕c7 48.a6 h5 49.h3 h4 ,=' 50. ♕a8 ♕c8 51. ♕a7 ♕c7=;

43... ♕e5 is the same as 43...g5. 44. ♕c6 g5 (Black is too slow with 44...♕f4?? 45. ♕b7 The a-pawn is too far advanced, White wins the race with many tempi...) 45. ♕b7 ♕d6! Changing the direction again! 46. ♕xa7 ♕c7= with the same draw as in the 43...g5 line.

44. ♕d5!

Black most probably forgot about this move and he collapsed right away. He is already facing a difficult calculation problem... 44. ♖b5 ♖c7 45. ♖a6 ♖b8= is safe for Black. Even if he gets into zugzwang, he can wait with ♖a8...

44... ♖c7?

The losing mistake, Black fails by one tempo... Let us examine the alternatives. Waiting with 44... ♖e7 was the best, knowing the fact that losing the a-pawn is not really a threat... 45. ♖e5 (45. ♖c6 g5 46. ♖b7 ♖d6 47. ♖xa7 ♖c7 is a draw as we already know.) 45... ♖d7 46. f4 ♖e7 47. f5 a6 48. ♖d5 ♖d7= Black holds the draw by keeping the opposition!;

44...g5? loses after 45. ♖e5 ♖c6 46. ♖f6 ♖b5 (46...h6 transposes to the game.) 47. ♖xg5 White promotes the f-pawn faster.;

44...g6 is another way to hold the draw! Black wins a very important tempo in the pawn race. In order to create a passed pawn White must capture both kingside pawns, while with the pawn on g7 it is enough to take that pawn and he can already advance the f-pawn... 45. f4 ♖c7 46. ♖e6 ♖c6 47. ♖f6 ♖b5 48. ♖g7 ♖xa5 49. ♖xh7 ♖b5 50. ♖xg6 a5 51. f5 a4 52. f6 a3 53. f7 a2 54. f8 ♚ a1 ♚ Black will suffer for at least 50 more moves, but with correct defense the game is drawn...

45. ♖e6 ♖b7 46. ♖f7 g5

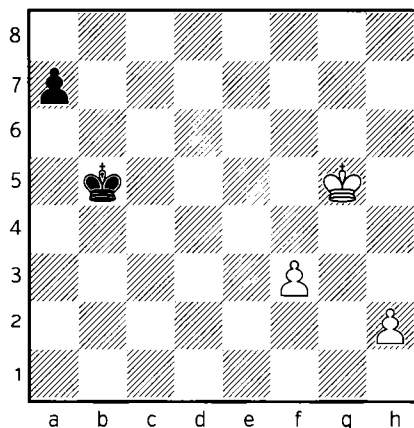
46... ♖a6 is too slow. 47. ♖xg7 ♖xa5 48. f4+- Black loses the decisive tempo by freeing the path for the a-pawn...;

46...g6 47. ♖g7 ♖a6 48. ♖xh7 ♖xa5 49. ♖xg6+- transposes to the game...

47. ♖f6 h6

47... ♖a6 48. ♖xg5 ♖xa5 49. f4+-

48. ♖g6 ♖a6 49. ♖xh6 ♖xa5 50. ♖xg5 ♖b5



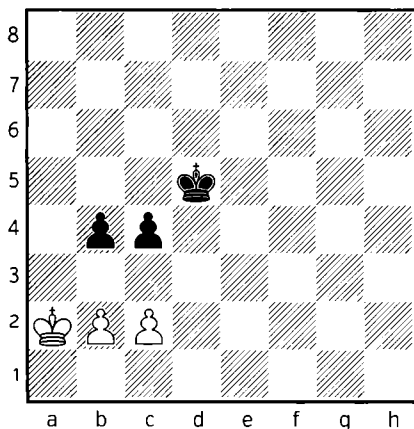
51. h4!

Perhaps Lupulescu forgot about this move, he thought in his pre-calculations that White has to push his f-pawn when they promote at the same time... However the point is that after 51. h4 a5 52. h5 a4 53. h6 a3 54. h7 a2 55. h8 ♚+- White promotes first and at the same time he controls the a1 square.

1-0

11

PROSKUROWSKI



Black has a more active king and he intends to invade through ♔d4-e3 and win the game. However the study of Proskurowski shows a unique defense with which White holds the draw

1.c3! bxc3 2.b4!! ♔c6

2...cxb3+ 3.♔xb3 ♔d4 4.♔c2=;

2...♔d4 3.♔b1 ♔d3 4.♔c1=

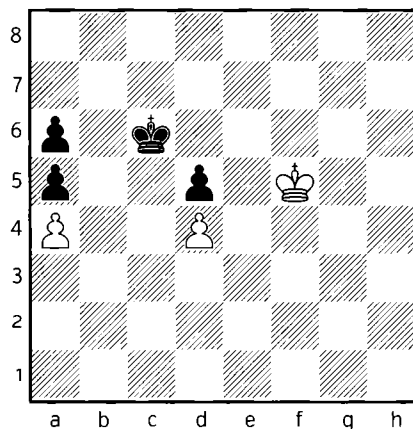
3.♔b1 ♔b5 4.♔c1

Actually 4.♔c2 also draws, because the doubled c-pawns are too far advanced, Black does not have a reserved tempo 4...♔xb4 5.♔c1 ♔b3 6.♔b1 c2+ 7.♔c1 and it is stalemate either way.

4...♔xb4 5.♔c2!=

12

BOTVINNIK



Botvinnik composed a beautiful study. It does not have such big practical importance, because such tripled a-pawns rarely occur in a game, but still it is very nice in itself.

1.♔e6

White proceeds by outflanking.

1...♔c7 2.♔e7!!

An amazing idea! White cannot take the d5 pawn, but he must go behind the a-pawn. 2.♔xd5 leads only to draw after 2...♔d7 3.♔c5 ♔c7 4.d5 ♔d7 5.d6 (5.♔b6 ♔d6 6.♔xa5 ♔xd5 7.♔xa6 ♔c6=) 5...♔d8 6.♔c6 ♔c8= Until White takes both a-pawns, Black is in time to squeeze the king to the a-file.

2...♔c6 3.♔d8 ♔d6 4.♔c8 ♔c6

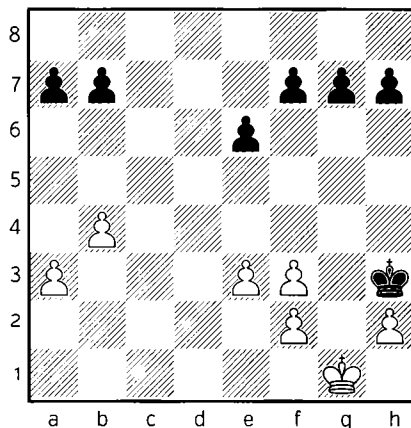
4...♔e6 5.♖b7 ♕f5 6.♖c6 ♕e4
7.♖c5+-

5.♖b8 ♖b6 6.♖a8!

And Black cannot play ♖a6!

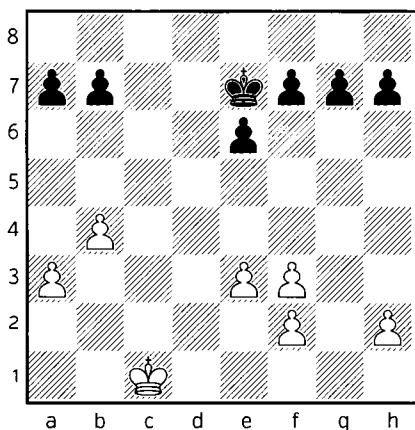
6...♖c6 7.♖a7+-

The rest is automatic. White gives up his a-pawn and wins the d5.



13

▷ E. COHN
▷ A. RUBINSTEIN
ST PETERSBURG, 1909



A classic example by the great Akiba Rubinstein on the topic of more active king and widening the space.

25...♖f6 26.♖d2 ♖g5 27.♖e2 ♖h4
28.♖f1 ♖h3 29.♖g1

The next step is to widen the space on the kingside to open the 3rd rank for the king to penetrate. Black must advance all his pawns.

29...e5

Start with g5 or h5 would have served the same purpose.

30.♖h1

Trying to fix the structure with 30.e4 creates a decisive hole on f4. Black wins after 30...b5! Principled move to take away all the tempi of White on the queenside 31.♖h1 h5 32.♖g1 ♖h4! 33.♖g2 ♖g5 34.♖g3 h4+ 35.♖h3 ♖f4 36.♖g2 g6+- White soon finds himself in zugzwang.

30...b5!

Paying attention on the details. Black fixes the queenside and takes away all the remaining tempi of his opponent. It was not forced, but definitely

a principled decision before executing the winning plan on the kingside.

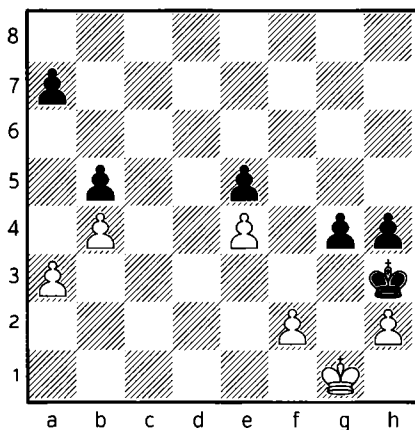
31. ♖g1 f5 32. ♖h1 g5 33. ♖g1 h5

The pawns are marching!

34. ♖h1 g4 35. e4

35. f×g4 f×g4! will be the same as the game.

35...fxe4 36. fxe4 h4 37. ♖g1



37...g3!

Mission complete. Black widens the space and gains access to the other pawns. He wins because of his more active king.

38. hxg3 hxg3

White resigned in view of 38...hxg3 39. f4 The breakthrough is too slow as the black pawns are too far advanced. (39. f×g3 ♖×g3-+;

39. f3 g2-+) 39...exf4 40. e5 f3 41. e6 f2+ 42. ♖f1 ♖h2 43. e7 g2+ 44. ♖×f2 g1 ♖+-+

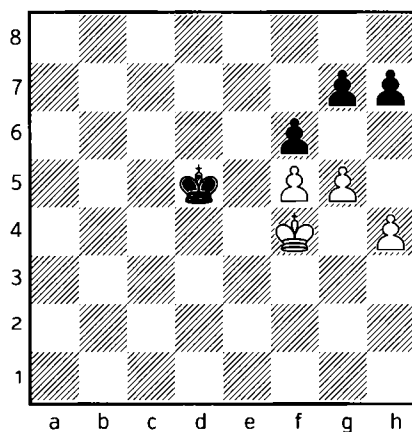
0-1

5.2. STALEMATE

Obviously as many pawns are on board as smaller the chance is to find some stalemate ideas, but still, we should never forget about this possibility.

1

▷ M. CHIGORIN
▷ S. TARRASCH
NUERNBERG, 1896

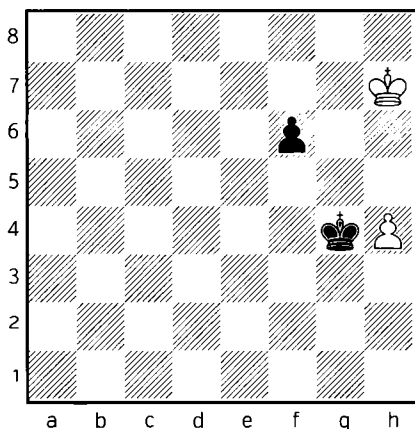


Black is trying to win by outflanking and indeed, he soon wins the f5 pawn. However a nice stalemate idea could have saved White.

1.gxf6?

Spoiling the chance. 1.♔g4! ♕e5
2.g6! h6 (2...hxc6 also leads to draw
after 3.fxc6 f5+ 4.♖g5 f4 5.h5 f3 6.h6=
and the pawns promote in the same
time.) 3.♖h5! = This is the point! And
Black cannot make progress only by
taking on f5, but it is stalemate.

1...gxf6 2.♖g4 ♕e4 3.♖h5 ♖xf5
4.♖h6 ♖g4 5.♖xh7



Chigorin has probably blundered the
next brilliant move in his pre-cal-
culations, which suddenly decides the
game on Black's favor.

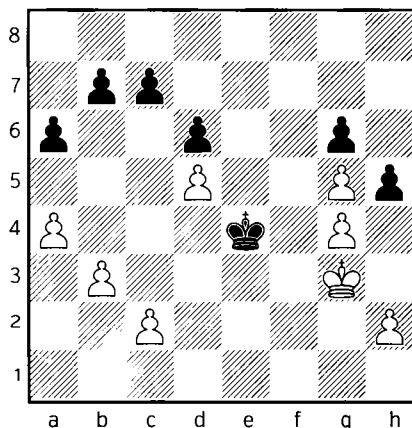
5...♖h5!!-+

Blocking the h-pawn and shouldering
to white king from the f-pawn.
White resigned. Other moves were
leading to draw: 5...♖xh4 6.♖g6=;

5...f5 6.♖g6 f4 7.h5 f3 8.h6 f2 9.h7 ♖
10.h8 ♖ = 0-1

2

▷ V. IVANCHUK
▷ WANG YUE
SOFIA, 2009



White is a pawn up and he is just
about to create a distant passed pawn
on the kingside. However a fantastic
idea of Wang Yue makes a full change
on the outcome

47...h4+!! 48.♖xh4 ♖f3

Stalemating the king on h4 forc-
es White to commit suicide on the
queenside!

49.b4

49.a5 also loses after 49...b6 50.b4 b5!
51.c4 (51.c3 ♖g2 52.h3 ♖h2-+ does
not change anything.) 51...bxc4 52.b5
c3 53.bxa6 c2 54.a7 c1 ♖ 55.a8 ♖ ♖e1+
56.♖h3 ♖f1+ 57.♖h4 ♖f2+ 58.♖h3
♖g2+ 59.♖h4 ♖xh2#;

49.c4 a5!-+ White will be forced to push b4 sooner or later.;

49.♔h3 ♕f2-+ White soon runs out of moves on the kingside. ♔h4 is met by ♕g2.

49...b5! 50.a5 ♕g2 51.h3 ♔h2

White resigned in view of 51...♔h2
52.c3 ♕g2 53.c4 bxc4 54.b5 c3 55.bxa6
c2 56.a7 c1♖ 57.a8♗ ♖e1#

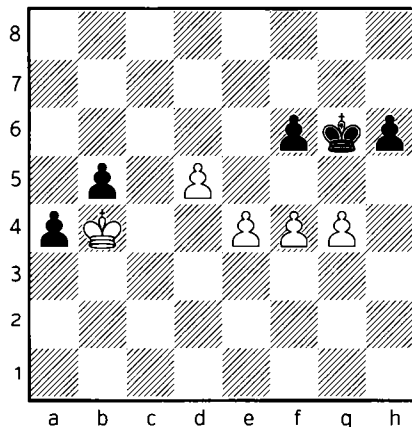
0-1

5.3. BREAKTHROUGH

Let's study some practical games, when a beautiful breakthrough has been executed. I would like to draw your attention on the Welling-Eingorn game, which shows a motif that was blundered by hundreds of players from amateurs to top GMs. Let's hope, that soon we will also win a game with this trick. :)

1

▷ IVKOV
▶ KELECEVIC
SARAJEVO, 1980



Black's connected passed pawns are blocked, while White can create two separated passed pawns by a nice breakthrough.

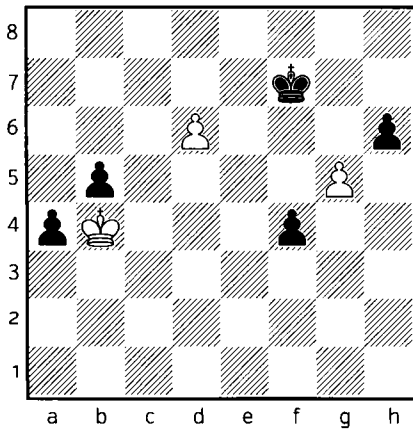
1.e5! fxe5 2.d6!

2.fxe5 ♕f7= is not enough.

2...♕f7

The same happens after 2...♕f6 3.g5+!
(And not 3.fxe5+ ♕e6=) 3...hxg5
4.fxg5+- and Black cannot stop both
pawns.

3.g5! exf4



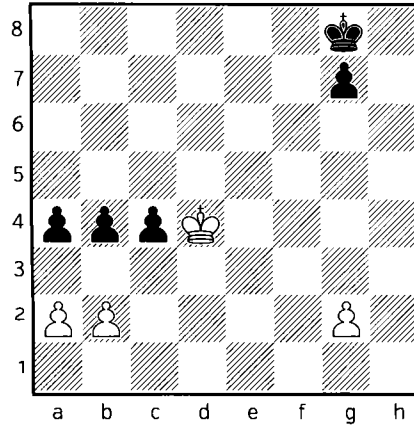
4.g6+!

White wins a crucial tempo with this check! In case of 4.gxh6 f3 the pawns promote in the same time. Another instructive motif is 4.d7! ♔e7 5.d8 ♚+! White sacrifices his more advanced passed pawn in order to lure Black to the 8th rank and now the promotion of the other pawn is coming with check. 5...♙xd8 6.gxh6 f3 7.h7 f2 8.h8 ♚++-

4...♙xg6 5.d7+- 1-0

2

PRACTICAL POSITION

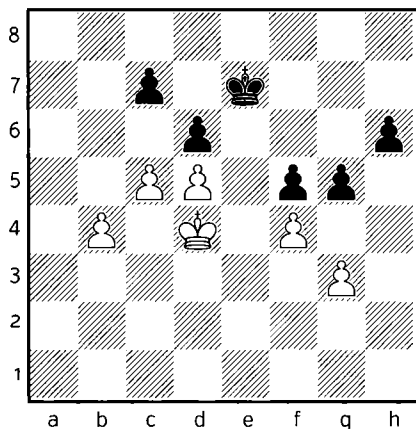


White is just about to eliminate the queenside, but a double breakthrough changes the outcome

1...c3! 2.bxc3 b3! 3.axb3 a3!-+

3

▷ A. CAMACHO
 ▶ R. HERNANDEZ
 CUBA, 1985



Another study-like practical game for the breakthrough:

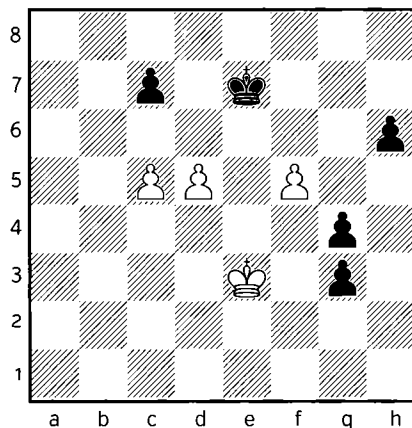
1.g4!!

Creating two separated passed pawns

1...fxg4 2.f5

White king is in the square of the g- and h-pawns, but he still needs to work for accomplishing the breakthrough.

2...dxc5+ 3.bxc5 g3 4.♔e3 g4



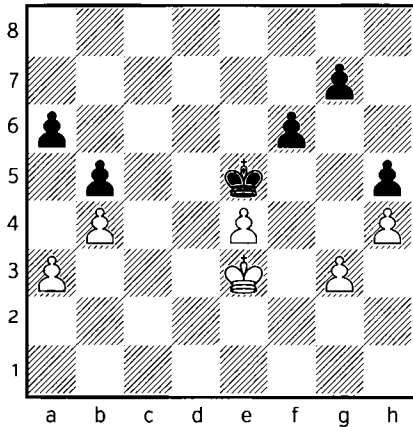
5.c6!

The delayed breakthrough! 5.d6+? did not work immediately because of 5...cxd6 6.c6 d5! 7.c7 ♔d7 8.f6 d4+= and at the end of the race both sides promote a queen.

5...h5 6.f6+! ♔xf6 7.d6!+- 1-0

4

▷ WELLING
▷ EINGORN
BAD WIESEE, 2006



1...g5??

The typical blunder which happened in hundreds of games on any level. Black has the more active king and he tries to create a distant passed pawn, but he blunders the following counterblow.

2.g4!! hxg4

2...gxh4 makes no difference 3.gxh5 ♖e6 (3...f5 4.h6 ♖f6 5.e5+ ♖g6 6.e6+-) 4.♖f4 ♖f7 5.♖g4+-

3.h5 f5

3...♖e6 is more stubborn, but also loses after 4.♖f2 ♖f7 5.♖g3 ♖g7 6.♖xg4 ♖h6 7.♖f5! ♖xh5 (7...♖g7 8.e5 fxe5 9.♖xg5+- and the typical

case with the distant passed pawn occurs. White plays ♖f5 next.) 8.♖xf6 g4 9.e5 g3 10.e6 g2 11.e7 g1♗ 12.e8♗+ ♖h4 13.♗h8+ ♖g3 14.♗g7+ ♖f2 15.♗xg1+ ♖xg1 16.♖e5+-

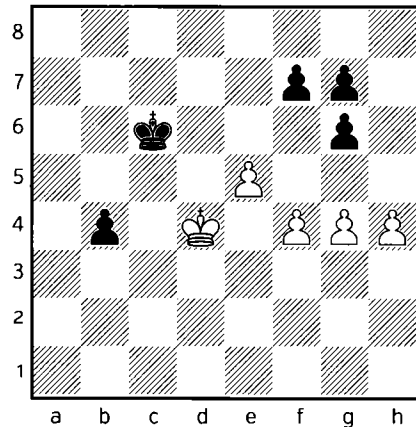
4.h6 f4+ 5.♖f2 ♖f6 6.e5+!

The black king cannot fight alone against the two separated pawns.

6...♖g6 7.e6 1-0

5

▷ S. MAMEDYAROV
▷ I. SOKOLOV
ESSENT, 2006



Black plays for the win with his distant passed pawn, but an unexpected breakthrough changes the outcome again.

1.f5! b3 2.♖c3 gxf5

After 2...♔d5 3.f6 gxf6 4.h5+- wins.

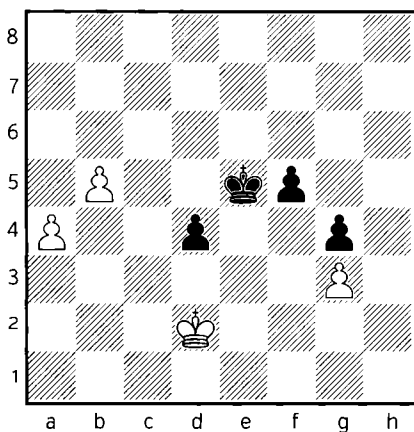
3.gxf5 ♕d5 4.e6! fxe6 5.f6! gxf6 6.h5!

Interesting to notice, that with the last two sacrifices White has not only made an h-passed pawn, but also blocked the black's king way to the corner through e6-f7 or e5-f6. Black resigned.

1-0

6

▷ G. STOLTZ
▶ A. NIMZOWITSCH
BERLIN BERLIN, 1928



The great Nimzowitsch has won a study-like endgame:

52...f4! 53.gxf4+ ♕d6!!

Fantastic retreat to stay in the square of the pawns. The black ones are running faster.

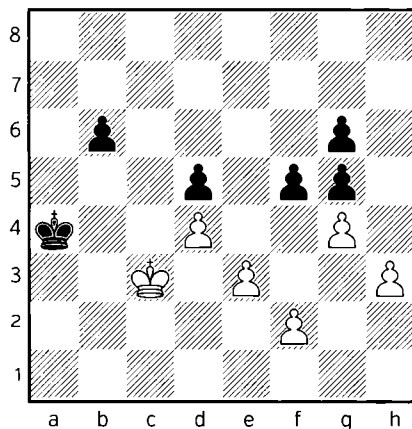
54.a5 g3 55.a6 ♕c7!

Stopping the most advanced pawn and the one on f4 is too far from the the promotion.

56.♕e2 d3+-+ 0-1

7

▷ A. GALLIAMOVA
▶ L. JAVAKHISHVILI
WORLD WOMEN TEAMS,
2013



Black has the more active king and he is threatening with ♕a3.

56.♕b2! ♕b4

Black has the more active king and by using the distant b6 passed pawn he has a clear plan to win. The question is if White can create counterplay on the kingside where he has the pawn majority.

57.f4!

Black immediately collapses. However, with an only move, Javakhisvili could have saved the game.

57...gxf4?

57...fxg4! 58.hxg4

A) 58...gxf4? loses after 59.exf4 ♖b5 60.f5! gxf5 61.g5! The standard breakthrough. 61...f4 62.♔c3+- White's king is close enough to stop the f-pawn and the g-pawn will promote soon.;

B) 58...♔b5!? seems to hold as well, although it looks very suspicious. 59.♔b3 ♖c6 60.♔b4 ♔b7 61.♔b5 ♔c7 White can never push f5, since the Black king is too close to catch it. fxg5 makes no sense because those doubled pawns have no value at all. White has nothing better than retreating with the king and settle for a draw. 62.♔b4 (This only causes problems for White: 62.♔a6? ♔c6 63.fxg5 ♔c7 64.♔b5 ♔b7 65.♔b4 ♔a6);

C) 58...♔c4! was the right move. 59.f5 gxf5 60.gxf5 g4 61.f6 g3 62.f7 g2 63.f8 ♕g1 ♕ and the draw is inevitable.

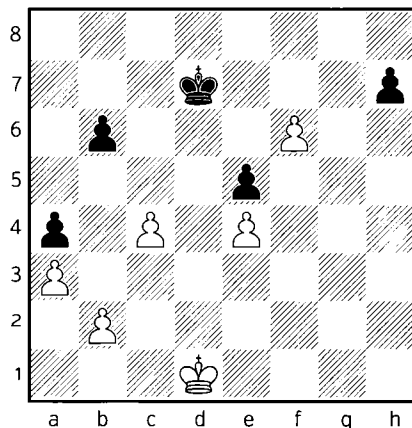
58.exf4 ♔c4 59.gxf5 gxf5 60.h4 ♔xd4

and Black cannot catch the h-pawn, while the d-pawn is too slow.

61.h5 ♔e3 62.h6 1-0

8

▷ D. BARAMIDZE
▶ I. KHAMRAKULOV
DRESDEN, 2008

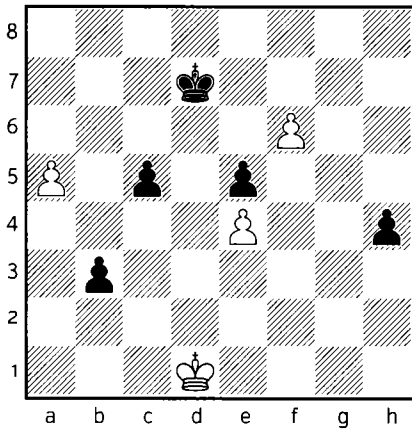


White seems to be in trouble, because Black has a distant passed pawn on h7 and on the queenside his pawns are blocked. However a nice breakthrough changes the evaluation

40.b4!

White creates a passed pawn, which together with the one on f6 cannot be stopped.

40...axb3 41.a4 h5 42.c5 bxc5 43.a5 h4



The a- and h-pawns promote in the same time, but White can win a decisive tempo by

44.f7!

Black resigned in view of 44.f7 ♔e7 45.a6 h3 46.a7 h2 and now 47.f8 ♖+! ♜xf8 48.a8 ♖++- So, the pawn promotes with check. 48...♔g7 49.♖b7+ ♔g6 (49...♔g8 50.♖c8++- and ♖h3 next.) 50.♖a6++- and ♖fi next move.

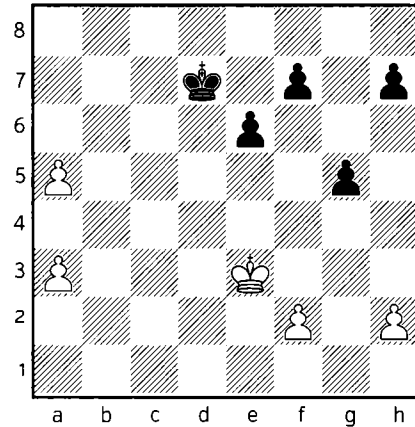
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5.4. PASSED PAWN

In this chapter, we will see again the strength of the passed pawns in the form of some more complex practical games.

1

▷ K. SHANAVA
▷ A. IPATOV
OLYMPIAD, 2014



We are examining a study-like pawn endgame. White seems to be completely winning, as he can sacrifice his distant passed pawns to lure to black king away from the kingside, meanwhile he might collect the pawns one by one with his king. However Ipatov finds a brilliant idea to save the game...

48.♔d4 h5!!

This is the start of the fantastic plan. Black needs to find several only moves to hold the draw. Other moves are losing, for instance 48...♔c6 49.♔e5 ♔b5 50.♔f6 g4 51.♔xf7 ♔xa5 52.♔xe6+- and the black king is too far away.

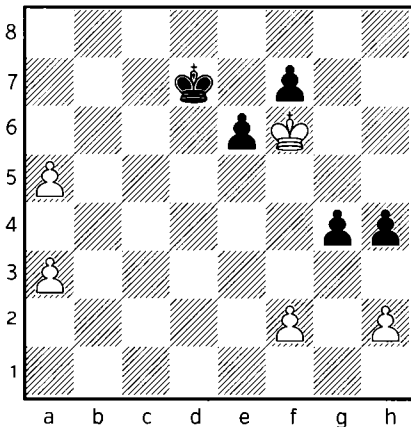
Black cannot block the king's path with 48...♔d6 because of 49.a6! ♕c6 50.♕e5+-;

48...f6 does not help either 49.♕c5 ♕c7 50.a6 g4 51.a7 ♖b7 52.♔d6 e5 53.♕e6 h5 54.♕xf6+- and in comparison to the game, Black is a tempo down and it turns out to be critical.

49.♕e5 h4!!

Only move again! Even if Black finds the right idea, he must execute it in the correct moveorder. 49...g4 loses to 50.♕f4! with the threat of ♕g5! 50...f6 51.♕g3! Collecting the h5 pawn first. 51...♕c6 52.♕h4 ♖b5 53.♕xh5 f5 54.♕g5 ♖xa5 55.♕f6+-

50.♕f6 g4!



51.♕g5!

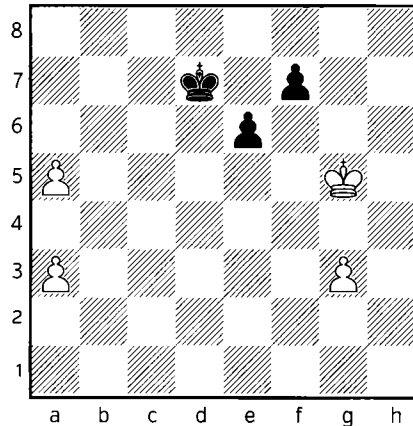
White also needs to be careful now. 51.♕xf7?? even loses the game, because Black is able to create passed

pawn with 51...e5! 52.♕f6 e4 53.♕f5 e3 54.fxe3 g3-+

51...g3! 52.fxg3

Of course not 52.hxg3?? h3-+

52...hxg3 53.hxg3



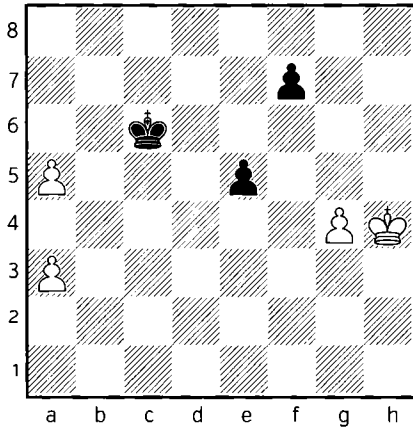
53...e5!

Another very important move! By sacrificing the g-pawn, Black has successfully created a protected passed e-pawn, but it has to be as far advanced as possible. 53...♕c6? loses in view of 54.♕f6 ♖b5 55.g4! ♖xa5 56.g5 ♖b5 And White promotes his pawn faster after 57.♕xf7! e5 58.g6 e4 59.g7 e3 60.g8♖+- This is the reason why Black should reach with his pawn the 5th rank.

54.g4

54.♕f5 f6= will be the same as the game.

54...♔c6 55.♔h4!?



A last tricky attempt to win the game, but Ipatov continues defend perfectly.

Now in case of 55.♔f5 f6 56.♔xf6 the pawns are promoting in the same time 56...e4 57.g5 e3 58.g6 e2 59.g7 e1♔ 60.g8♔ = Black can either give perpetual check or just simple take on a5 and the a3 pawn remains useless. 60...♔xa5

55...f6!

The last accuracy! All the excellent previous moves would have turned to be useless if Black plays 55...♔b5? the point of 55.♔h4 was to put the pawn on g5 to avoid Black protecting his e-pawn with f6. 56.g5! ♔xa5 57.♔g4 ♔a4 58.♔f5+-

56.g5

There was nothing left to try. Black was ready to collect the a-pawns,

White also had to get rid of the king-side pawns...

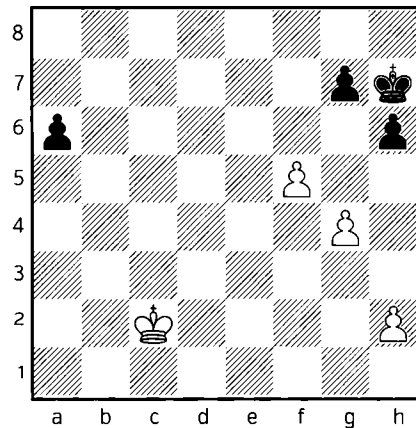
56...fxg5+ 57.♔xg5 ♔b5 58.♔f5 ♔xa5 59.♔xe5 ♔a4 60.♔e4 ♔xa3

An awesome resource by Black! We can see, that in pawn endgames (also in other type of endgames) the passed pawns are playing a very important role. White seemed to have all the chances to win due to his a-pawns, but Black found the salvation in creating a e-passed pawn too...

1/2

2

▷ M. OGANIAN
 ▶ A. MOKSHANOV
 POLUGAEVSKY MEMORIAL,
 2015



A very instructive pawn endgame. The principle says that in pawn end-

games the distant passed pawns play an extremely important role and usually the side that has them has the advantage. This is the case in our example as well. The white king is forced to go far away towards the a6 pawn and at the same time Black could try to gain some benefits on the kingside.

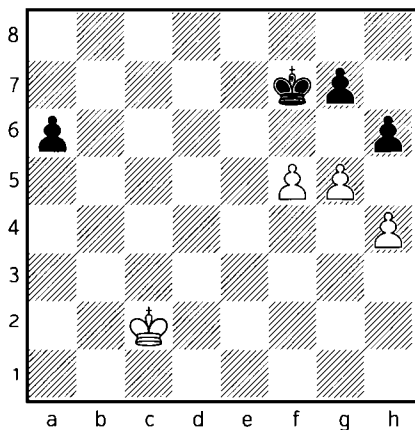
55...♔g8!

It is clear that Black must collect the pawns with his king, therefore he goes around with his king despite it costing some time...

56.h4!

The only move! 56.♖b3 ♕f7 57.♖b4 ♕f6 58.♖a5 ♕g5 wins easily. The white king is too far away from the action... 59.h3 ♕h4 60.♖xa6 ♕xh3-+

56...♔f7 57.g5



White tries to force some exchanges, which would lead him closer to the draw. If Black takes on g5, White

takes back, followed by f6, securing the draw. Black must keep all his pawns on the board to continue playing for the win!

57...h5! 58.♖c3 ♕e7 59.♖b4

Sooner or later White must go in this direction. If he waits on c4-d4, Black lures the king away with a5 anyway...

59...♖d6 60.♖a5 ♕e5 61.f6

Otherwise Black takes all the pawns.

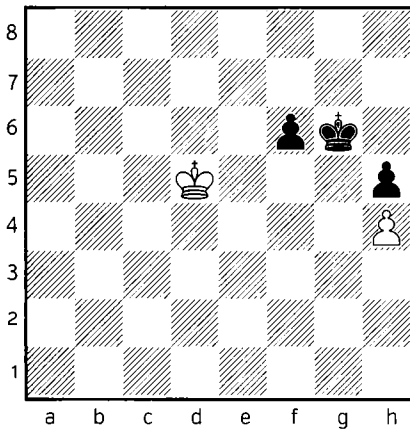
61...gxf6 62.g6

62.gxf6 loses by just one tempo: 62...♕xf6 63.♖xa6 ♕f5 64.♖b5 ♕g4 65.♖c4 ♕xh4 66.♕d3 ♕g3 67.♕e2 ♕g2! and the white king does not get into the corner to secure the draw. He should have reached the f1 square.

62...♕e6!

Black comes back with his king and collects the g6 pawn. He soon ends up with an extra pawn, but it still remains very instructive!

63.♖xa6 ♕f7 64.♖b5 ♕f8 65.♖c5 ♕g7 66.♕d5 ♕xg6



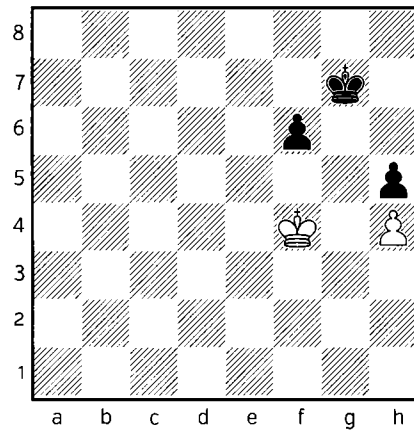
67. ♔e4!

These positions are very tricky and easy to miscalculate. Black is winning here, but it requires good technique. The key is the mutual zugzwang position when the kings are on f7 and on f5. Black must transfer his king to e6 in order to be able to push f5 (the direct f5 is met by ♔e5 with an immediate draw). However he must exclude the f7 square from his way, he must only go there if White plays ♔f5. 67. ♔e6 leads to the mutual zugzwang position more quickly. 67... ♔g7 68. ♔f5 ♔f7 later transposes to the game...

67... ♔g7!

Not the shortest, but the right path towards e6.

68. ♔f4



68... ♔f8!

After Black found the deep ideas in this simple looking endgame he executes the plan correctly. 68... ♔f7 69. ♔f5 forces the king to go back to g7 with repetition.

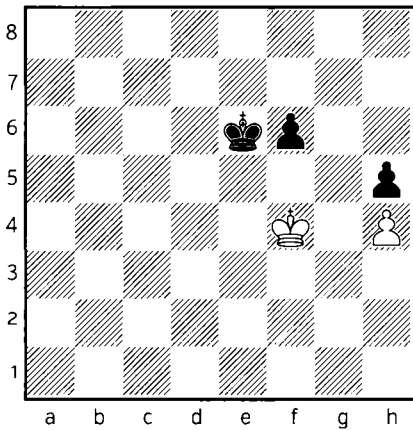
69. ♔e4 ♔e7 70. ♔f5

70. ♔f4 is already met by 70... ♔e6 71. ♔e4 f5+ 72. ♔f4 ♔f6-+ followed by ♔e5, f4, etc, with an automatic win.

70... ♔f7!

Here we are! The mutual zugzwang, but White is on move, therefore Black reaches the e6 square next move with his king. If it was his move ♔e7 would allow ♔g6.

71. ♔e4 ♔e6 72. ♔f4



72...f5!

It is already possible to advance the extra pawn, because collecting the h5 pawn takes too much time.

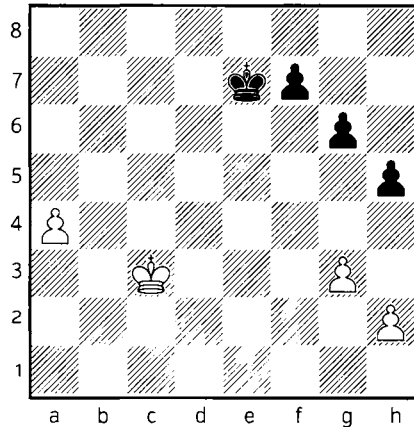
73. ♖g5 ♕e5 74. ♖xh5 ♖f6!

The most principled win, squeezing the white king to the corner. This makes the pawn race more easily winning for Black. However 74... f4 75. ♖g4 ♕e4 also wins despite the pawns promoting at the same time... 76.h5 f3 77.h6 f2 78.h7 f1 ♕ 79.h8 ♕ ♕g2+!-+ and Black wins the queen next move with a check on the h-file.

75. ♖h6 f4 76.h5 f3 77. ♖h7 f2 78.h6 ♖f7 79. ♖h8 f1 ♕ 80.h7 ♕a1# 0-1

3

▷ R. FISCHER
 ▶ B. LARSEN
 DENVER DENVER, 1971



Fischer demonstrates the power of the distant passed pawn in a classical example.

41. ♖d4 ♖d6 42.a5

White deflects the black king to the queenside to open the path for his own king to collect the material on the other side.

42...f6

Trying to prevent the invasion along the e5 square, but White finds another square to invade.

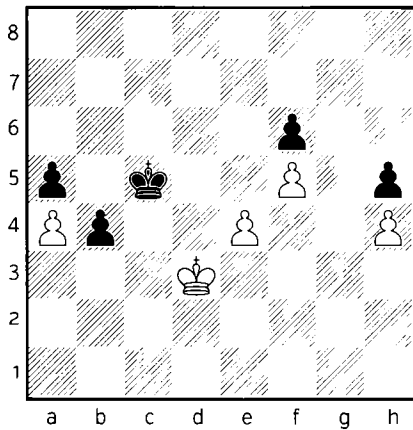
43.a6 ♖c6 44.a7 ♖b7 45. ♖d5 h4 46. ♖e6

Black resigned as he cannot trade all the pawns on the kingside and his king will be too far away.

1-0

4

▷ SEIRAWAN
▷ KASPAROV
NIKSIC, 1984



A great and complex practical endgame by Kasparov! We are facing the topics of protected passed pawn, which can be used as distant passed pawn, triangulation and zugzwang. Black should sacrifice the b-pawn to get the e4-f5 pawns. However the most direct attempts fails to win. If he tries to drive his king first to e5, ♔d6 is always met by ♔d4. Kasparov therefore triangulates, keeping in mind, that ♔d4 is met by ♔d6 and he wants to get our initial position,

just with White to move who would be in zugzwang.

1... ♖c6!

Too early to deflect the white King with 1...b3 2. ♖c3 b2 3. ♖xb2 ♔d4 4. ♖b3 ♖xe4 5. ♖c4 ♖xf5 6. ♖b5 ♖g4 7. ♖xa5 f5 8. ♖b4 Black will have an extra h-pawn in the queenendgame, which we discuss in the Queen endgame chapter.

2. ♖c4 ♖c7! 3. ♖d3 ♖d7!

Brilliant triangulation, using the fact, that ♖d4 always loses to ♖d6 and the black king gets to e5!

4. ♖e3 ♖c6 5. ♖d3

5. ♖d4 ♖d6-+

5... ♖c5!

Here we are, the king is back to c5, but now White in on move.

6. ♖e3

Otherwise ♖d4, but now

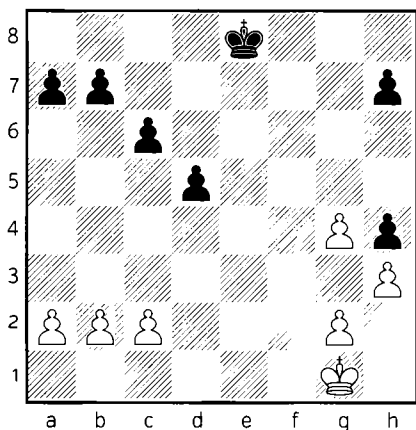
6...b3! 7. ♖d3 ♖b4! 8.e5 ♖a3!

and the b-pawn promotes first with check!

0-1

5

▷ D. DE VREUGT
 ▶ A. BYKHOVSKY
 TEL AVIV, 2000



At first sight the position seems to be quite difficult to evaluate, but after few moves we just reach a typical easy winning endgame with a distant passed pawn...

25. ♖f2 ♕e7 26. g3 hxg3+ 27. ♔xg3
 ♖f6 28. ♖f4 h6

Other moves are also losing. For instance 28...c5 29.h4 b5 The „untouched” position of the white queen-side pawns make the creation of the passed pawns much more difficult for Black. 30.g5+ ♕e6 31.h5 White just uses the classical method of winning such endgames. Sacrifices his pawn to deflect the black king followed by collecting the black pawns. 31...b4 32.g6 hxg6 33.hxg6 ♖f6 34.g7 ♕xg7 35.♕e5 d4 36.♕d5+-

29.h4 c5 30.a4

Not the only win, but good enough.

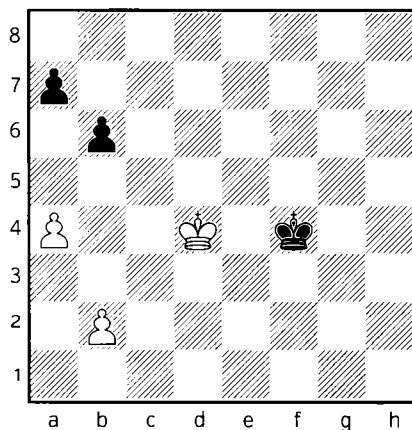
30...b6 31.g5+ hxg5+ 32.hxg5+ ♔g6

Black tries to make a pawn chain from a7-b6-c5-d4. In this case the standard deflection of the king with the passed pawn would not work. He must have a closer target.

33.c3

The simplest, but a5 (which cannot be taken because of ♕e5-d5) or waiting for a making a weakening with ♕g4-f4 was also winning.

33...d4 34.cxd4 cxd4 35.♕e4 ♕xg5
 36.♕xd4 ♖f4



36...♕f5 37.♕d5+- Keeping the shoulder.

37.b4!

We already know the shouldering technique. White improves his pawns first until Black cannot approach towards the pawns. Other moves were drawn. For instance: 37.♔c4 ♕e5 38.♕b5 ♕d6 39.♕a6 ♕c5 40.♕xa7 ♕b4=

37...♕f3

37...♕f5 38.♕d5+-

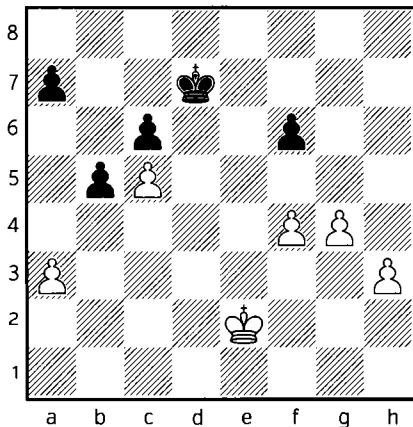
38.b5!

Black must still go around, but White already can go to capture the pawns.

38...♕e2 39.♕d5 ♕d3 40.♕c6 ♕c4 41.♕b7 1-0

6

▷ G. MEIER
▷ C. BALOGH
SPICE CUP, 2012



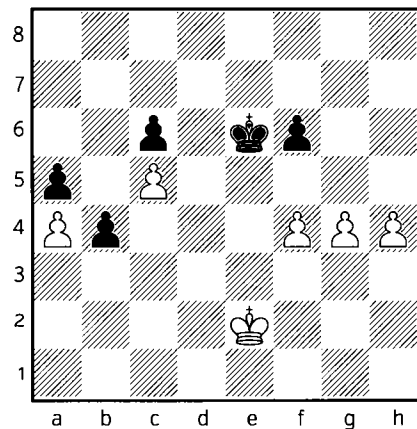
36...a5!

This is the key move! Despite being a clear pawn up, White can't make progress because he needs his king to promote his kingside pawns, although it has the duty to stop the queenside pawns. The move order was really relevant, since after any other move, for example 36...♕e6? White has 37.a4! avoiding to create a passer. 37...b4 (37...bxa4 38.♕d3+-) 38.a5!+-

37.a4

This is the best chance, otherwise Black pushes a4 himself. Now the White king can go to e4 to stay in the square of the b-pawn. On 37.♕e3 a4!= the White king must stay on the d-file, otherwise b4 will be played. The lines will be the same as in the game.

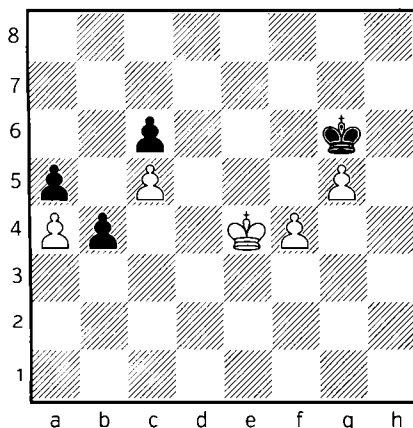
37...b4 38.h4 ♕e6



39.g5

39.♔d3 ♕f7 40.♕e4 ♖g7 Sooner or later, White has to advance one of his pawns.;

39.f5+!? is a tricky attempt. 39...♕f7 40.g5 ♖g7! It's very important to keep the f6 pawn on the board. (40...fxg5? 41.hxg5 +- wins for White as the line 42...♖g7 will show us.) 41.♔d3 ♕f7= followed by passing on g7 and f7. White can't make progress.



39...fxg5

Actually 39...f5 also leads to a draw. 40.h5 ♕f7 41.h6 (41.♔d3 ♖g7 42.g6 ♕f6 43.♔d4 ♖g7 White can't improve his position.) 41...♖g6 42.♔d3 ♖h7 43.♖c4 ♖g6 44.♔d4 ♖h7 45.♕e5 and now it's very important not to hurry with the b-pawn. 45...♖g6! The White king needs to turn back to stop the pawn.(45...b3? loses to 46.♕f6! b2 47.g6+ ♖xh6 48.g7 b1♚ 49.g8♚+- The Black pawns start to fall one by one.)

40.hxg5

40.fxg5 ♕f5 41.♔d3 ♖g6 42.♕e4 ♖h5 is also a draw.

40...♕f5 41.♔d3 ♖g6 42.♕e4

42...♖h5!

This is the last key move, which had to be foreseen. White must settle with a draw, since any attempt to win leads to a defeat... 42...♖g7? loses instructively. 43.f5 ♕f7 44.♔d4 ♖g7 45.f6+ ♖g6 46.♕e4 ♕f7 White can triangle with his king in any case to reach this position, and now 47.♕f5! This might be the only winning motif in this type of endgames. Now it works well. Black queens first, but loses the game. 47...b3 48.g6+ ♕f8 49.♕e6! b2 50.g7+ ♖g8 51.♕e7 b1♚ 52.f7+ ♖xg7 53.f8♚+ ♖g6 54.♚f6+ ♖h7 55.♚xc6+-

43.♔d3

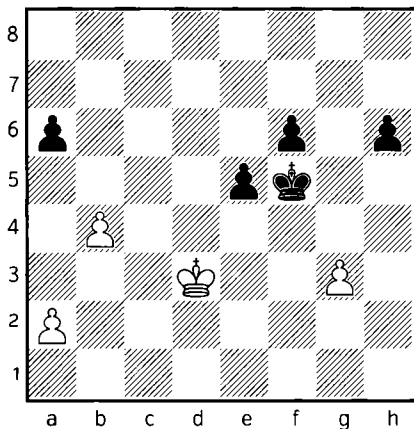
43.♕f5? b3 Black promotes with check!;

43.f5? loses to 43...b3! (43...♖xg5 44.♕e5) 44.♔d3 ♖xg5 45.♖c3 ♕xf5 46.♕xb3 ♕e4

43...♖g6 44.♕e4 ♖h5 45.♔d3 1/2

7

▷ HOU YIFAN
 ▷ V. ANAND
 WIJK AAN ZEE, 2013



Anand has just wrongly forced exchanges on the f5 square and despite being a pawn up he cannot win.

43.a4! ♖e6

Black had to run back to catch the pawn, but it allows White to play:

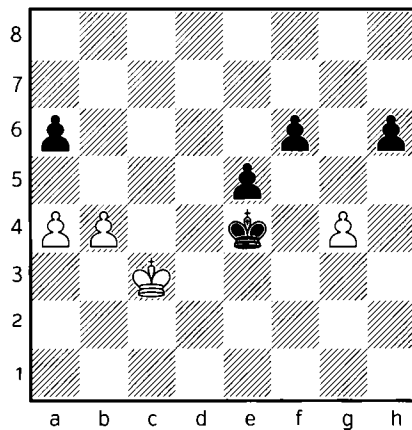
44.g4!!

Excellent reaction! One pawn on g4 neutralizes two Black pawns on f6 and h6... they can't create a passed pawn.

44...♔d5 45.♖c3!

The Black king can't be allowed to go to c4 and the queenside pawns can't be touched until Black pushes e4.

45...♔e4



45...e4 as soon as Black weakens his pawn structure, White is ready to sacrifice the queenside pawns to collect all the pawns on the other side. White actually uses the standard distant passed pawn technique to save the game. 46.b5! axb5 47.axb5 ♖c5 48.b6 ♖xb6 49.♔d4 ♖c6 50.♖xe4 ♖d6 51.♖f5 ♖e7 52.♖g6=;

45...♔d6 46.♖c4 ♖c6 47.♖d3 Black can't make progress this way.

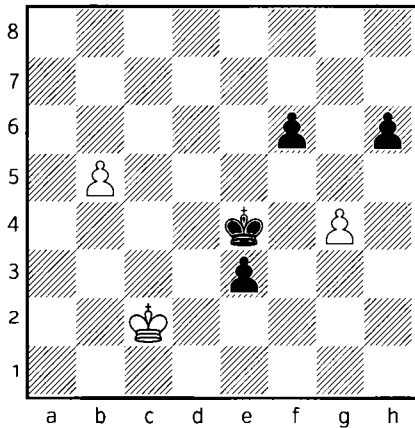
46.♖c2!?

A good waiting move for Black to push e4. 46.b5 was another instructive way to get the draw. 46...axb5 47.axb5 ♖d5 48.♖b4 ♖d6 49.♖c4 ♖c7 50.♖c5 ♖b7 51.♖c4 ♖b6 52.♖b4 White only waits with ♖c4-b4. The only winning attempt for Black is to push e4, but then the White king collects the pawns just like in the 46...e4 line. 52...e4 53.♖c4=

46...♔d4 47.♖b3 e4

The time has come for White to play:

48.b5! axb5 49.axb5 e3 50.♔c2!
♖e4!?



The last trick by the Anand, but Hou Yifan doesn't fall for it.

51.♔d1!

White blocks the pawn, so Black is forced to go back to the b-pawn. On 51.b6? Black retains his winning chances after 51...♖f3! 52.b7 e2 53.b8 ♖ e1 ♖

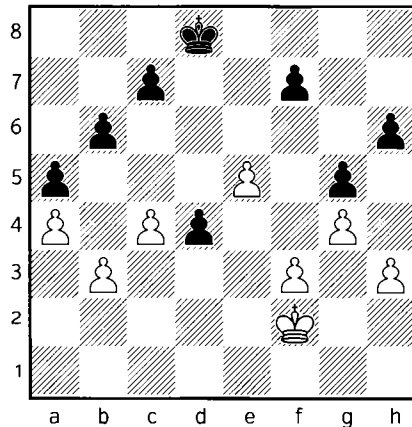
51...♔d5

The draw was agreed in view of 51...♔d5 52.♖e2 ♖c5 53.♖xe3 ♖xb5 54.♖e4 ♖c5 55.♖f5 ♔d4 56.♖xf6 ♖e4 57.♖g6 ♖f4 58.♖xh6 ♖xg4=

1/2

8

▷ A. GRISCHUK
▷ V. KRAMNIK
FIDE CANDIDATES, 2013

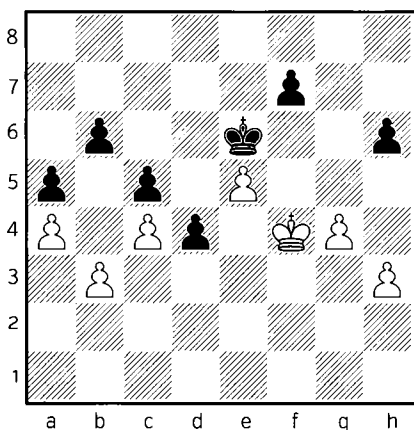


The next game shows the strength of the protected passed pawn on d4, which will be protected by c5 and then the black king goes for the e5 weakness.

31.♖e2 ♔d7 32.♔d3 c5 33.♖e4 ♖e6

White is in zugzwang. He has only one move not to lose the e5 pawn.

34.f4 gxf4 35.♖xf4



35...d3!

Kramnik uses his protected passed pawn as a distant passed pawn. He exchanges it to the one on e5 and the key will be the activity of the Black king!

36. ♖e3 ♜xe5 37. ♜xd3 ♜f4!

The game is over. Black collects the h3 pawn.

38. ♜e2 ♜g3 39. ♜e3 ♜xh3 40. ♜f4

40. ♜f3 is equally hopeless. 40...f6 winning the opposition by „wasting” a tempo. 41. ♜f4 ♜g2! Going behind the pawn. 42. ♜f5 ♜g3 43. ♜xf6 ♜xg4-+ and the h-pawn is too fast.

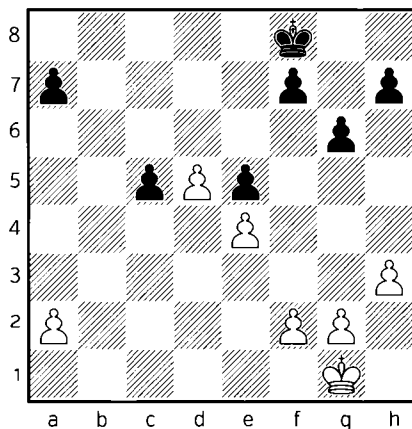
40... ♜h4 41. ♜f5 ♜g3

White resigned in view of 41... ♜g3 42.g5 h5! 43. ♜f6 ♜g4-+

0-1

9

▷ LE QUANG LIEM
▷ A. GRISCHUK
WORLD CUP, 2013



White has all the chances to play for the win because of his protected passed pawn, but let's see how things are looking in the reality.

36. ♜f1

White has to transfer his king to c4.

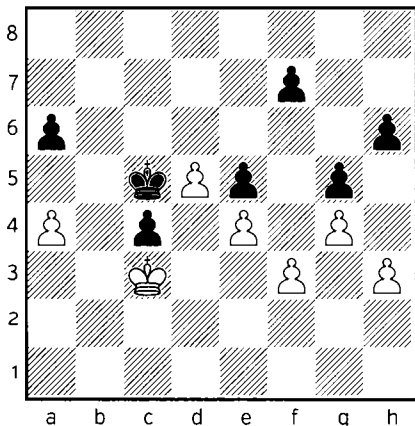
36... ♜e7 37. ♜e2

For Black the best practical chance is to push c4 and get his king to c5. Grischuk should have tried it now or a move later, although it objectively does not affect the final outcome.

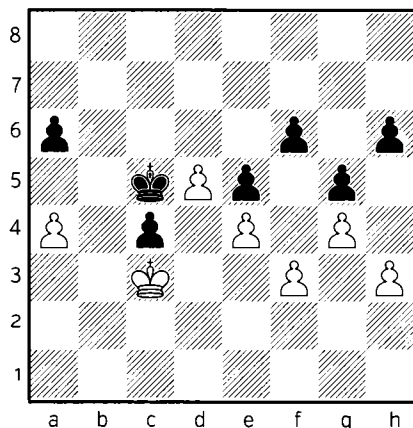
37...f5

Black tries to get rid of the protected passed pawn, but obviously White has no intention to give it away... 37...

c4 38.♔d2 ♕d6 39.♕c3 ♕c5 40.g4 g5 (40...f6 leads to the same after 41.h4 h6 Now all moves will lead to the same result. 42.a4 h5 43.gxh5 gxh5 44.f3 a6 And we will see the winning method in the 40... g5 line.) 41.a4 a6 42.f3 h6



It looks like Black has many tempi left and White has no way to make use of the d5 pawn. The c5 king safely protects the c4 pawn. However the reality is different... 43.♕c2! White starts to make triangulations with the king, using the fact that Black cannot play ♕d4 or ♕b4, since it has to block the d-pawn. 43...♕b6 44.♕b2! This is the zugzwang! Black should play ♕c6 now, but it is impossible... 44...♕c5 45.♕c3 Black is forced to move one of his pawns... 45...f6



White has won the first tempo, time to start the second triangulation... 46.♕c2! ♕d6 47.♕d2 ♕c5 48.♕c3! And again Black has to move his pawn. 48...a5 49.♕c2! (But not 49.d6? ♕xd6 50.♕xc4 ♕c6=) 49...♕b6 50.♕b2! ♕c5 51.♕c3!+-

38.f3! ♕d6?!

This allows the White king to c4, after which the win is easy. 38...fxe4 39.fxe4 c4 was still a better try, but White wins with the same technique as in the 37...c4 line: 40.♕d2 ♕d6 41.♕c3 ♕c5

In such pawn endgames, when we try to get our opponents into zugzwang, the best technique is to move with the pawn, which has already moved once. So, if it White's turn, he should play h4, and if it was Black to move, g5 would have been his best move! 42.h4! h6 (Whenever Black plays 42... ♕b5 43.d6! wins! 43...♕c6 44.♕xc4 ♕xd6 45.♕b5+- Winning either the a7 or the e5 pawn.) 43.g4 g5 44.hxg5

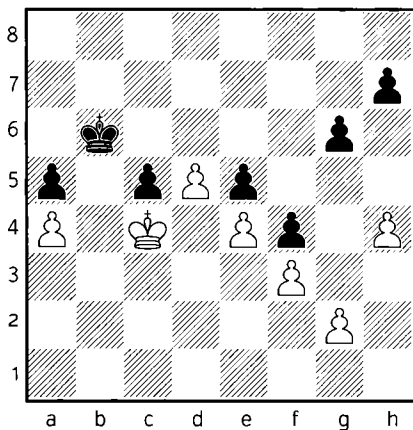
hxg5 45.a4 a5 Here again White uses the zugzwang technique, which we already know. 46.♖c2! ♖b6 47.♖b2 ♖c5 48.♖c3+-

39.♖d3 f4 40.h4!

This is the most principled win, White fights for all the tempi on the king-side. 40.♖c4 was also good enough. 40...g5 41.♖b5 a6+ 42.♖c4 And Black soon gets into zugzwang. 42...h6 43.a3 h5 44.a4 a5 (44...h4 45.a5+- And the c5 pawn will fall because of the zugzwang.) 45.♖b5+-

40...♖c7 41.♖c4 ♖d6

41...♖b6 does not change anything. 42.a4 With the threat of a5! 42...a5



43.d6 ♖c6 44.d7 ♖xd7 45.♖xc5+- White collects either the e5 or the a5 pawn.

42.♖b5 h6 43.♖c4 a6 44.a3

Black resigned in view of White either playing a4-a5 in the next two

moves and creating zugzwang, or if Black prevents it by playing a5, ♖b5 decides the game.

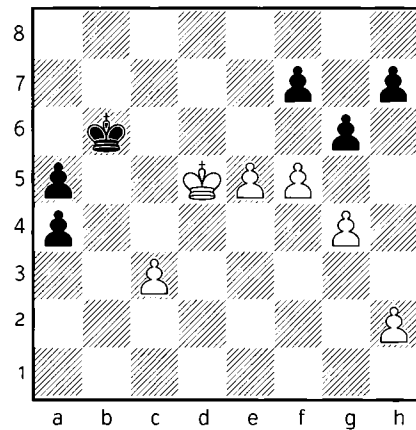
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10

▷ V. IVANCHUK

▷ B. JOBAVA

WIJK AAN ZEE, 2015



43.♖c4!

The white king stops the passed pawn. But of course, it is not the end of the story...

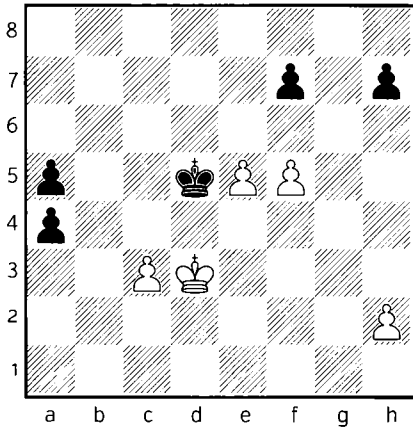
43...gxf5 44.gxf5 ♖c6

It looks like White is in trouble. He soon gets into zugzwang and needs to move with his king, but then ♖d5 wins the e5 pawn. However the truth is different:

45. ♔d3!

White simply wants to go towards the a-pawns. Black must play

45... ♔d5



And here comes the great breakthrough!

46.e6! fxe6 47.f6!

Both sides have two separated passed pawns, but the white ones are promoting faster!

47... ♔d6 48.c4! e5

48... ♔d7 loses to 49.c5 ♔e8 50.c6+-; 48... a3 49. ♔c2+- does not change anything.

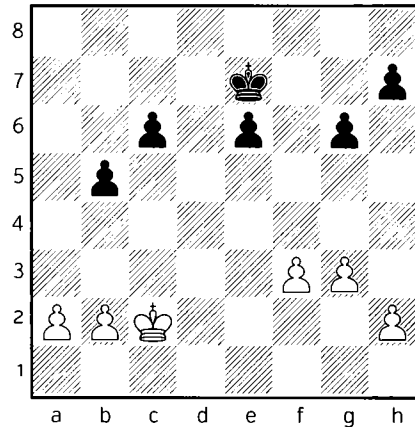
49.c5+!

Very important tempo!

49... ♔e6 50.c6 a3 51.c7 ♔d7 52.f7 a2 53.c8 ♖+ ♔xc8 54.f8 ♖++- 1-0

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▷ P. LEKO
▷ V. IVANCHUK
EUROPEAN TEAMS, 2015



30...c5

White has the advantage because of the distant passed pawn that can be created on the a-file. The question is if it is enough for the win?!

31.a3!

We have learned, that one must pay attention on the details, how to create the passed pawn. 31.b3 allows Black to fix the queenside with 31...b4 32. ♔d3 ♔d6 33. ♔c4 ♔c6 and White does not reach anything by setting Black into zugzwang, because the e6 pawn controls the d5 square, therefore Black can simple move ♔b6-c6. 34.f4 h5 35.h3 ♔b6 36.g4 hxg4 37.hxg4 ♔c6=

31... ♔d6

Black has no time to fix the queenside now with 31...c4? 32.♔c3 ♕d6 33.♖b4 ♕c6 34.a4! bxa4 35.♕xc4!+- and White wins the a4 pawn and the game.

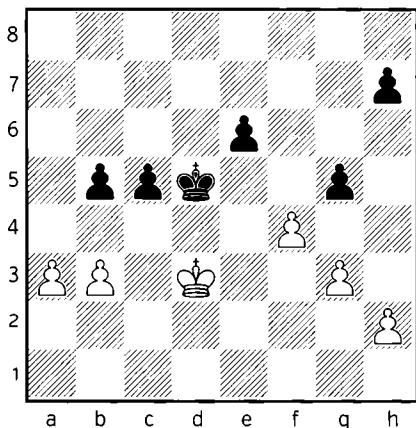
32.b3 g5 33.♕d3

White activates his king first. The direct a4 does not bring anything because of ♕c6.

33...♕d5

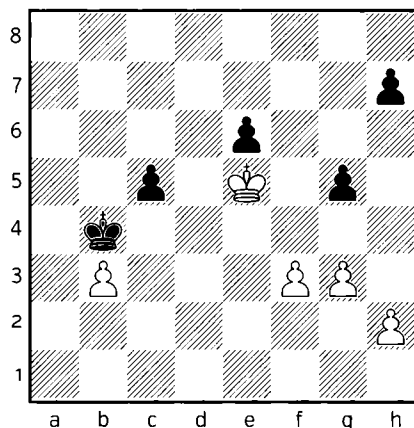
A very risky move, which just does not lose by one tempo in a long and forced line. Both players calculated it until the end, but still it is better practically to avoid just decisions. It would have been easier to play 33...♕c6 we will discuss these positions later in the game.

34.f4

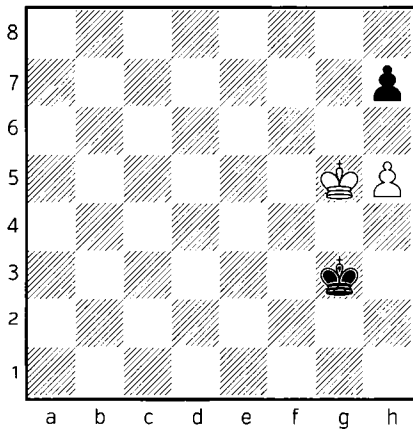
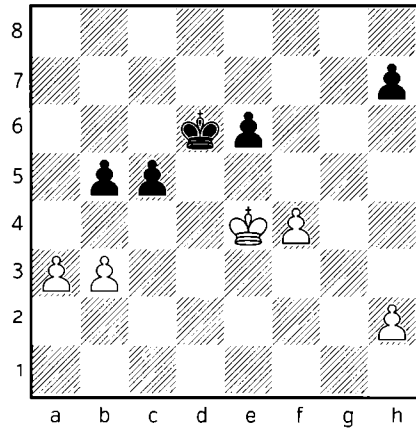


The very interesting option was 34.a4!? the point is, with the king on d3, Black could counter this move with c4! and after bxc4 bxa4 and

suddenly he is the one who has created a distant passed pawn. However with the king on d5, c4 bxc4 is check! Black is forced to take back, but then, White has the distant a-passer. 34...♕c6! Only move! (34...bxa4 leads to the typical loss with the distant passer 35.bxa4 c4+ 36.♕c3 ♕c5 White has different wins here. The key is, that at some point he will give up his a-pawn for the c and then his king will be closer to the other pawns to collect them. 37.h4 gxh4 38.gxh4 e5 39.h5 h6 40.a5 ♕b5 41.a6 ♕xa6 42.♕xc4+- and ♕d5 wins next.) 35.♕e4 ♖b6! Another only move! Black wants to play c4, which was not possible immediately because of axb5 is a check. (35...c4? loses to 36.axb5+ ♕xb5 37.bxc4+ ♕xc4 38.f4! gxf4 39.gxf4 and ♕e5 wins next move.) 36.axb5 (36.♕e5 is already met by 36...c4! 37.bxc4 bxa4 White can still hold the draw with 38.♕d6! the pawns promote in the same time and if Black goes, = 38...♖b7 with the idea of 39.c5 ♕c8, then White forces repetition with 39.♕d7! ♖b6 40.♕d6=) 36...♕xb5 37.♕e5 ♖b4



38.♔d6! This is the key resource of White's plan. It looks like he is winning because the after eliminating the c5 and b3 pawns his king against stands closer to the kingside. However, Black just survives... (38.♔xe6 ♔xb3 leads to easy draw 39.f4 gxf4 40.gxf4 c4 41.f5 c3 42.f6 c2 43.f7 c1♚ 44.f8♚=) 38...♔xb3 39.♔xc5 ♔c3 40.♔d6 ♔d4 41.♔xe6 ♔e3 42.♔f5 ♔xf3 43.♔xg5 ♔g2! Just in time to restore the material balance. It is still not over yet, because the white king stands well, but not well enough to win the game... 44.h4 ♔xg3 45.h5



White wants to go h6 and ♔f6-g7, but Black is just in time to squeeze the king into the corner. 45...♔f3 46.h6 ♔e4! 47.♔f6 ♔d5! 48.♔g7 ♔e6 49.♔xh7 ♔f7= This was all forced after 34. a4. A nice line to calculate as a training exercise.

34...gxf4 35.gxf4 ♔c6

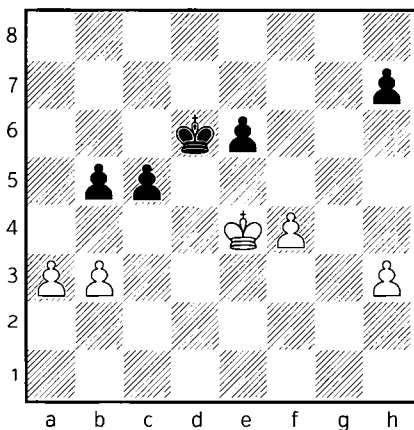
Another instructive line goes with 35...♔d6 36.♔e4

36...♔c7! is the way to draw! With the white king on e4, Black should avoid moving to the mined square on c6! The point is again the same as before, on a4 he must be able to reply with c4, but for this the king cannot stay in the axb5check! (The most natural looking 36...♔c6? loses to 37.a4! and the differen. ce to the 34.a4 line is, that the white pawn already stands on f4, therefore White is winning in the same line. 37...♔b6 38.axb5 ♔xb5 39.♔e5 ♔b4 40.♔d6! ♔xb3 41.♔xc5 ♔c3 42.♔d6 ♔d4 43.♔xe6+-) 37.♔e5 ♔b6= This is Black's easiest defensive resource. He actually does not need to do anything else, then waiting with ♔c7-b6 and White cannot make progress, because of c4 and the pawn promotes too quickly.

36.♔e4

The king has moved to the mined c6 square, however the white king also stands there, therefore 36.a4 could be met by 36...c4+! check! 37.♔c3 cxb3 38.axb5+ ♔xb5 39.♔xb3=

36...♔d6 37.h3



37...♔d7!

Ivanchuk does not fall into the trap! This or 37...♔c7 holds the draw. He just needs to be careful that with the white king on e4, he should not move to ♔c6. 37...♔c6? loses as we have seen in the 35...♔d6 36.♔e4 ♔c6 line. 38.a4+-

38.♔d3 ♔c6 39.♔e4 ♔d6 40.h4

Another invitation for Black to go wrong with ♔c6, but of course he does not miss it.

40...h5 41.♔e3 ♔c7 42.♔d3 ♔c6
43.♔e4 ♔d6 44.♔e3 ♔c7 45.♔d3
♔c6 46.♔e4

Draw agreed! A seemingly easy endgame, but there were many subtleties.

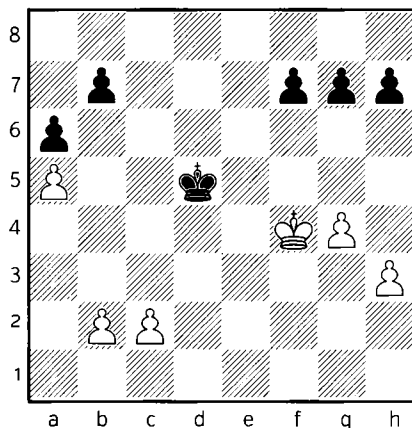
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5.5. COMPLEX

In the closing chapter of the pawn endgames, we study some practical games. Throughout the examples we are going to meet with many from the ideas, that we discussed before and we are already familiar with. Enjoy!

1

▷ I. SARIC
▷ A.K. FISCHER
VIENNA OPEN, 2012



Suddenly, the game was simplified to this amazingly complex pawn endgame. The position is full of fascinating motifs. First of all, let's try to find out who is better and why... Black has a seemingly more active king, but his pawns are squeezed down, they cannot move. The a5 pawn blocks excellently the queenside and if the Black king goes to take it, White appears to be faster to collect the kingside

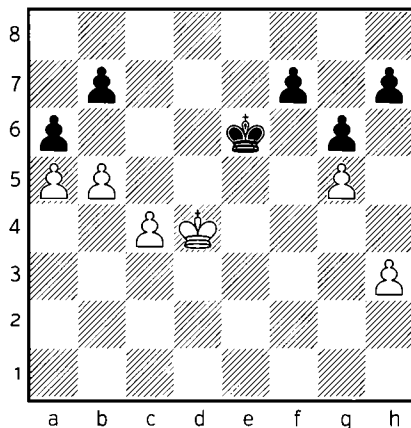
pawns and promote his own pawns. White's only winning attempt is the following: to play g5, ♖f5 and h4-h5-h6, making an „entrance square” on f6 for the pawns.

30.g5!

Very strong move. Just like the a5-pawn on the queenside, the g5-pawn completely restricts the mobility of the kingside pawns. Other moves with the same idea were not so dangerous. For example: 30.♖f5 h6! Black prevents g5 and starts moving with his king on the d-file.

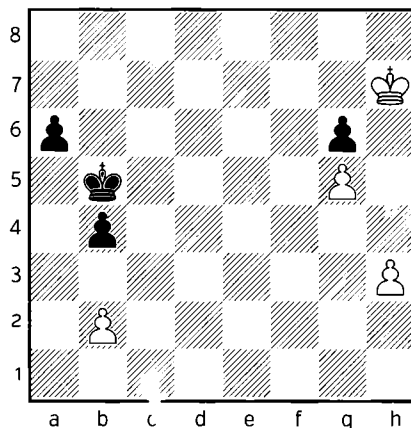
30...♔e6!

Only move! Black needs to create a passed pawn, he intends to play f5 next. 30...g6? is probably the most logical move to prevent ♖f5 and the h4-h5-h6 plan, but it has a huge drawback as well: it gives up the f6 square. The a5 pawn does such a good blocking job that White can lure the king to the queenside and he will be still ahead in time to promote his g-pawn... 31.c4+! ♕xc4 White gets a winning queen endgame by force after the big pawn race. (31...♔e6 This is too passive, it cannot lead to anything good for Black... 32.b4 ♕d6 33.♕e4 ♕e6 34.b5! White has a well-known breakthrough in this kind of 3 vs 2 situations, which he can comfortably execute here... 34...♕d6 35.♕d4 ♕e6



36.c5! with the idea of 36...axb5 37.c6! This is the point. 37...bxc6 38.a6+-;

After 31...♔d4 32.h4!+- Black is in zugzwang. He must allow White to play ♕e5.) 32.♕e5 ♕b4 33.♕f6 ♕xa5 34.♕xf7 b5 35.♕g7 b4 36.♕xh7 ♕b5



37.h4! White will be up with a g5 pawn, which is clearly much better than the one with h3, after ♕xg6, and promoting the g-pawn. 37...a5 38.h5 a4 39.hxg6 a3 40.bxa3 bxa3 41.g7 a2 42.g8 ♖ a1 ♖ 43.♖d5+ +- with a theoretically winning endgame, that we

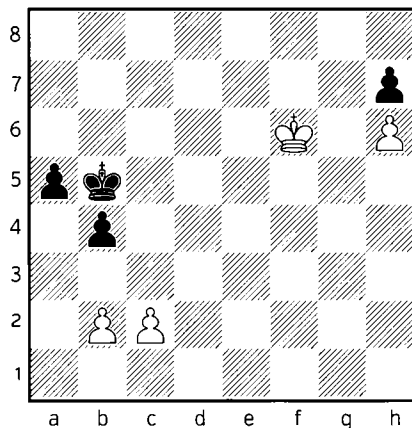
are going to analyse in the Queen endgames.;

30...♔d4? 31.♕f5 ♕e3 The active try had to be calculated precisely, but if we do a good job, we come to the conclusion that White wins by one tempo... (31...♕d5 The waiting policy of passing on the d-file is a very bad idea now. White can simply execute his winning plan. 32.h4 ♕d6 33.h5 ♕e7 34.h6 gxh6 35.gxh6+- and by pushing the queenside pawns, White lures the king and he can simple penetrate with the king.) 32.h4! ♕d2 33.h5

A) 33...g6+ does not help. 34.hxg6 fxg6+ 35.♕f6 ♕e3 (35...♕xc2 36.♕g7+- The a5-pawn is an excellent blockader.) 36.♕g7 ♕f4 37.♕h6+- followed by pushing on the queenside again.;

B) 33...♕xc2 34.h6 The usual winning technique. 34...gxh6 35.gxh6 ♕xb2 36.♕f6 ♕c3 37.♕xf7 ♕b4 38.♕g7 ♕xa5 39.♕xh7 b5 40.♕g6 b4 41.h7 b3 42.h8♙+-;

30...♕c5? is too slow. 31.♕e5 ♕b5 32.♕d6 ♕xa5 33.♕e7 f5! Black wins a few tempi with this, but still fails to save the game. 34.gxf6 gxf6 35.♕xf6 b5 36.h4 b4 37.h5 ♕b5 38.h6 a5



and here comes the key move:

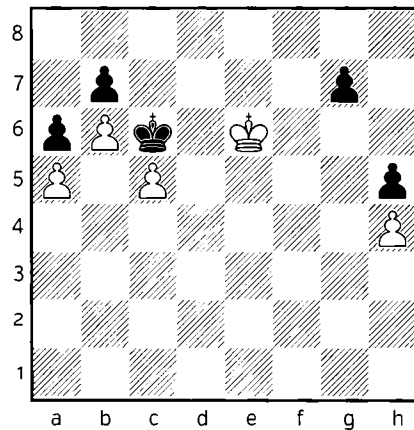
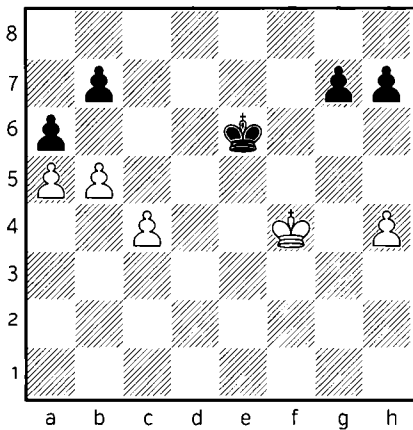
39.b3!+- This stops the a-pawn. Black needs to go around with his king, but of course, White is much faster here.

31.c4

White correctly advances the queenside pawns. Other moves like b4 and h4 will lead to the same positions as in the game.

31...f5!

Principled defense! Black needs to make use of his pawn majority on the kingside. The passive defense is not recommended here either, but the refutation is really difficult now: 31...♕d6? 32.b4 ♕e6 33.h4 f5! Only chance. (Black could not wait any longer with 33...♕d6 34.♕f5 ♕e7 35.h5+- and h6 next.) 34.gxf6 ♕xf6 35.b5 ♕e6



We are at another critical moment, where we really need to use our calculating skills. 36.b6!! Pure calculation is needed. With the help of the c5-c6 threat, White wants to enter in the opponent's camp. It's important to notice that if Black goes for the a5-pawn, it's enough for White to reach the c7-square with the king and he'll still queen faster with his b-pawn. 36...♙d6 37.♙f5

A) 37...♙c5 is not an option. 38.♙e6 ♙xc4 (38...♙b4 39.♙d6 ♙xa5 40.c5+-) 39.♙d6 ♙b5 40.♙c7+-;

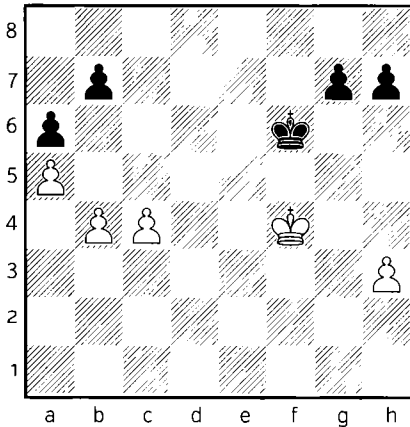
B) 37...♙e7 38.♙e5 ♙d7 39.c5! Despite being with a plus on the kingside, Black cannot create a passed pawn. The move h6 is always met with h5, and he doesn't have enough time for g6 and h6, because of ♙f6... 39...♙c6 (39...h6 40.h5+- is easy.) 40.♙e6 h5!

(40...♙xc5 41.♙d7+-) 41.♙e7!! A similar ending arises after 41.♙f7, but there will be a huge difference... 41...g5 Black needs to play this move, otherwise White just plays ♙d8-c8. 42.hxg5 h4 43.g6 h3 44.g7 h2 45.g8 ♙h1 ♙ and here White has the fantastic 46.♙d8!! The idea is simply to collect the b7 pawn. He can go with the king to a7 if it's needed and then the pawn automatically falls. 46...♙xc5 47.♙b3!! is the most precise, but not the only move here. Next is ♙c7 or in case of 47...♙c6 48.♙c4+ ♙d6 49.♙c7+ ♙e6 50.♙c8+- wins.

32.gxf6!

White has no choice of course. If Black manages to create a protected passed pawn with g6, he cannot have any more problems in this game... 32.b4? g6

32...♙xf6 33.b4



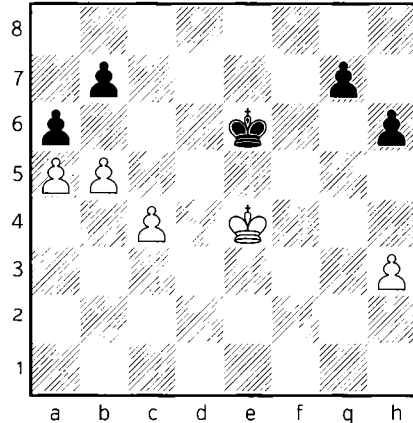
And we have reached another critical moment, The most critical one, from the game point of view. After finding a few only moves, Black makes a mistake and loses. There was only one way to save the game...

33...g5+?

33...♙e6? will lead us back to the previous line with 31...♙d6. 34.h4! ♙e7 (34...♙f6 35.b5 ♙e6 36.b6+- We transposed to 31...♙d6.) 35.b5 ♙d6 36.b6! ♙e6 and here again, we end up in the same position after 37.c5! ♙d5 38.♙f5 ♙xc5 39.♙e6 h5 40.♙d7 g5 41.hxg5 h4 42.g6 h3 43.g7 h2 44.g8 ♖ h1 ♗ and again White has some good possibilities, but the strongest is 45.♗b3! ♗c6+ 46.♙d8+- with the threat of exchanging the queens. Black must allow the king to have access to the b7 pawn. The game is practically over;

33...h6!! The only move to draw! Black's idea is to get rid of the king-

side pawns, after which he can calmly walk to the other side with the king. At any moment, when White plays h4, he needs to push g5 and White is forced to take it. As we saw in the 31... ♙d6 and 33...♙e6 lines, the key was that White managed to get his pawn to h4 and was ready to play h5 against h6... 34.b5 (34.♙e4 ♙e6; 34.h4 g5+!) 34...♙e6! Otherwise, the c5-c6 break works... 35.♙e4



(35.c5?? would be a terrible blunder. 35...axb5 36.c6 ♙d6! 37.cxb7 ♙c7 Black stopped the pawns and the passers on both flanks to win the game. 38.a6 g5+)

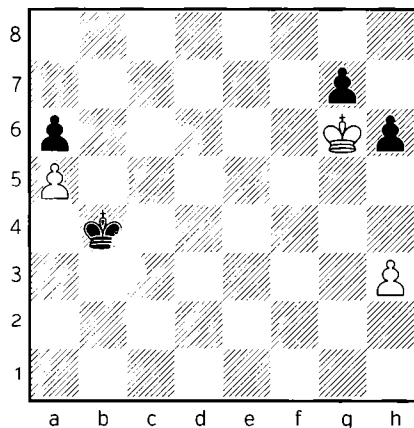
A) After the other candidate move 35...g6 White wins again with subtle play. 36.♙d4! g5 (36...♙d6 loses by one tempo. 37.c5+ ♙d7 38.bxa6! bxa6 39.♙e5 ♙c6 40.♙f6 ♙xc5 41.♙xg6 ♙b4 42.♙xh6 ♙xa5 43.♙g6+- and both pawns are promoting at the same time, but White does it first and controls the a1 square...) 37.♙e4 h5 Black seemingly manages to fin-

ish his plan and exchanges the king-side pawns, but White is in time again. Now he wins even by two tempi... 38.b6! ♖d6 39.♗f5 g4 40.hxg4 hxg4 41.♗xg4 ♖c5 42.♗f5 ♖xc4 43.♗e6 ♖b5 44.♗d7 ♖xa5 45.♖c7 ♖b4 46.♗xb7 a5 47.♖c6 a4 48.b7 a3 49.b8♗+ +-

B) 35...♗d6! Another only move! 36.♗f5 (36.♗d4 would ease Black's task. 36...axb5 37.cxb5 g5 Now the draw is clear. The two kings will remain alone on the board soon... 38.♗e4 h5 39.♗f5 g4 40.hxg4 hxg4 41.♗xg4 ♖c5 42.a6 bxa6 43.bxa6 ♖b6=) 36...♗:5

B1) After 37.bxa6 it is White who needs to be very careful to hold the draw. The way he does this is very instructive, again! 37...bxa6 38.♖g6 ♖b4! By not wasting time on the c4 pawn, Black promotes his queen first and controls the h8 square. However, with a pawn on h7 and the king on g8 against the queen, the position is a theoretical draw, with a well-known stalemate trick. Yes, but this stalemate does not exist with the existence of the c4 pawn. After all, it's clear what White has to do... (38...♖xc4?? is a blunder 39.♖xg7 ♖b4 40.♖xh6+ 39.♖f5!! (39.♖xg7? ♖xa5 40.♖xh6 ♖b4 41.h4 a5 42.h5 a4 43.♖g7 a3 44.h6 a2 45.h7 a1♗+ 46.♖g8 ♗a8+ 47.♖g7 ♗b7+ 48.♖g8 ♗c8+ 49.♖g7 ♗d7+ 50.♖g8 ♗d8+ 51.♖g7 ♗g5+ 52.♖f7 ♗h6 53.♖g8 ♗g6+ 54.♖h8 and here, due to the c4 pawn, Black wins with 54...♗f7! and there is no stalemate. 55.c5 ♗f8#) 39...♖xc4 (39...♖xa5 also

leads to a draw. 40.♗e6! White goes to support the c-pawn. 40...♖b6! Only move. 41.♗d6 ♖b7! Only move again. Black wants to play ♖c8, so White is also forced 42.♗d7! ♖b6 43.♗d6= with a repetition.) 40.♖g6! After the c-pawn disappeared, White can go for the mentioned endgame, but the execution still needs precision! 40...♖b4



41.h4!! White has to push his pawn to h5 first! (41.♖xg7? loses to 41...h5! lures away the White king. 42.♖g6 ♖xa5 43.♖xh5 ♖b6 44.♖g6 a5 45.h4 a4 46.h5 a3 47.h6 a2 48.h7 a1♗) 41...♖xa5 42.h5! ♖b4 43.♖xg7 a5 44.♖xh6 a4 45.♖g7 a3 46.h6 a2 47.h7 a1♗+ 48.♖g8 ♗g1+ 49.♖h8 = with a theoretical draw;

B2) 37.b6 h5! This is the most precise! (37...♖xc4 also leads to a draw, but Black needs to suffer for a long time. 38.♗e6! g5 39.♗d7 h5 40.♖c7 g4 41.hxg4 hxg4 42.♗xb7 g3 43.♖xa6 g2 44.b7 g1♗ 45.b8♗ This is theoretically drawn, but of course, I don't wish anyone to have this kind of queen

endgame. Usually, it lasts for about 100 moves.) 38.h4 ♔xc4 39.♔e6! Only this direction! (39.♔g6 is too slow. 39...♔b5 40.♔xh5 ♔xa5 41.♔g6 ♔xb6 42.♔xg7 a5 The Black pawn arrives with check!) 39...♔b5 40.♔d6 ♔xa5 41.♔c7 g5! 42.hxg5 h4 43.g6 h3 44.g7 h2 45.g8♗ h1♗ = This is our final position! If both sides play flawlessly from this initial position, they will reach this position and agree to a draw soon. An excellent exercise for practicing calculation, but I believe that to find all these moves with a limited time control is only possible with some luck... (maybe even with an unlimited time control :-).)

34.♔g4 ♔g6 35.b5

And White is breaking through!

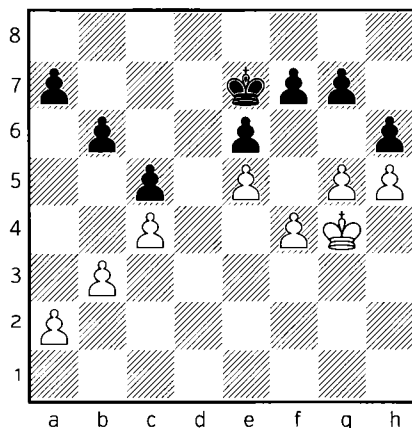
35...h5+ 36.♔g3 ♔f5 37.c5!

Black resigned because of 37...axb5 38.c6! A very instructive endgame!

1-0

2

▷ B. GRACHEV
▷ S. TIVIAKOV
MINSK OPEN, 2014



Pawn endgames are always very tricky and require very exact calculation. In the current position White has a big space advantage, but it looks almost impossible to break through as the black pawns are controlling all the invading squares of the king. However White makes a last attempt...

47.f5??

The only attempt to create an invading square for the king, but it is actually a blunder which could have cost to the game. In case of other moves Black would just have waited with the king with ♔d7-e7 and held the draw. If White includes 47.gxh6 gxh6 48.f5 he is not threatening to play f6 as the g-pawns are not on the board any-

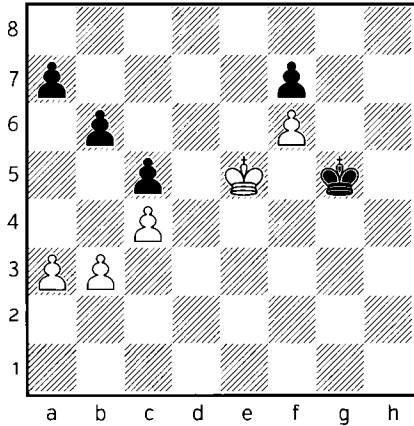
more, which is why Black can simply ignore everything and play 48... $\text{c}\text{e}8$ 49. $\text{c}\text{f}4$ $\text{c}\text{d}8$ = With an inevitable draw because of the fortress.

47...exf5+?

The most natural reaction, but it spoils the sudden chance. 47...hxg5! would have won for Black as the following lines demonstrate:

A) 48.f6+ gxh6 49.h6 does not help.

A1) 49... $\text{c}\text{f}8$ is also good. 50.exf6 $\text{c}\text{g}8$ 51. $\text{c}\text{h}5$ $\text{c}\text{h}7$ 52. $\text{c}\text{xg}5$ e5 53. $\text{c}\text{f}5$ $\text{c}\text{xh}6$ 54. $\text{c}\text{x}e5$ $\text{c}\text{g}5$ White loses the f-pawn. A last try could be 55.a3

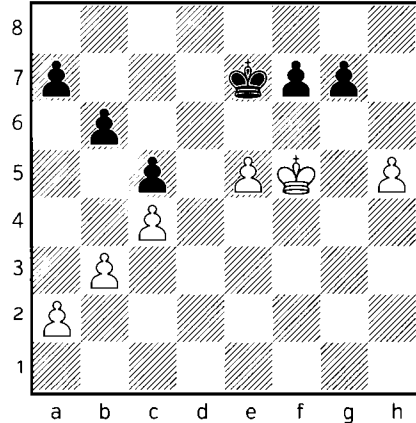


with the idea to play b4, bxc5 and the king is going to take the c-pawn, thus also obtaining a passed pawn. However Black simply plays

55...a5!-+ followed by waiting with $\text{c}\text{g}6$ and then winning the pawn race. (55... $\text{c}\text{g}6$? 56.b4);

A2) 49...f5+ is the simplest, creating a protected passed pawn. 50. $\text{c}\text{xg}5$ $\text{c}\text{f}8$ 51. $\text{c}\text{h}5$ (51. $\text{c}\text{f}6$ loses the pawn race by one tempo: 51... $\text{c}\text{g}8$ 52.h7+ $\text{c}\text{xh}7$ 53. $\text{c}\text{x}f7$ f4 54. $\text{c}\text{x}e6$ f3-+) 51... $\text{c}\text{g}8$ 52. $\text{c}\text{h}4$ $\text{c}\text{h}7$ 53. $\text{c}\text{g}5$ f4!-+ With an easy win. Black takes on h6, creates a new passed pawn with $\text{c}\text{g}6$, f6 and easily converts the extra pawn.;

B) 48. $\text{c}\text{xg}5$ exf5 49. $\text{c}\text{x}f5$



49...g6!! This sacrifice is the whole point! Black uses the logic of the distant passed pawn. He deviates the king in order to win the e-pawn. 50.hxg6 fxg6+ 51. $\text{c}\text{xg}6$ (51. $\text{c}\text{e}4$ leads to the classical distant passed pawn situation. Black wins by sacrificing it: 51... $\text{c}\text{e}6$ 52. $\text{c}\text{f}4$ g5+ 53. $\text{c}\text{e}4$ g4 54. $\text{c}\text{f}4$ g3 55. $\text{c}\text{xg}3$ $\text{c}\text{x}e5$ followed by $\text{c}\text{d}4$ -c3 etc, collecting the pawns.) 51... $\text{c}\text{e}6$ The king excellently stands on e6 as it also wins an important tempo by preventing the king's approach to the f-file... 52. $\text{c}\text{g}7$ $\text{c}\text{x}e5$ 53. $\text{c}\text{f}7$ $\text{c}\text{d}4$ Black is much faster. 54. $\text{c}\text{e}6$ $\text{c}\text{c}3$ 55. $\text{c}\text{d}6$

♔b2 56.♔c6 ♕xa2 57.♔b7 ♕xb3
58.♕xa7 ♕xc4-+

An excellent example to practice the opposition.

48.♕xf5 hxg5 49.♕xg5 ♔e6 50.♕f4
♔d7 51.♕f5 ♔e7

53.f6!

With the king on d7, Black cannot play 51...g6+? because White is not forced to take twice on g6, but plays 52.♕f6! gxh5 53.♕xf7 and wins.

The only move to keep the material balance.

52.♕f4

53...♕xf6 54.♕xe4 ♔g5!

And a draw was agreed since both sides are just waiting. 52.♕f4 ♔d7
53.♕e4 ♔e6 54.♕f4 ♔e7=

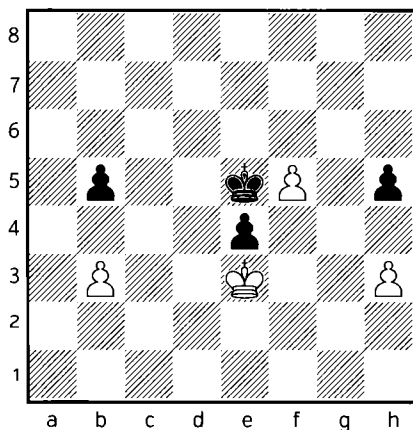
Forcing the white king into passivity, as Black would win the race if White goes for the b-pawn.

1/2

55.♕f3!

3

► M. GAGUNASHVILI
► Z. ALMASI
EUROPEAN CHAMPIONSHIP,
2013



55.♔d5? ♕h4 56.♔c5 ♕xh3 57.♕xb5
h4 58.♕a6 ♕g4 59.b4 h3 60.b5 h2
61.b6 h1♚ 62.b7 with a theoretical win for Black! 62...♚c6+ 63.♕a7
♚c5+ 64.♕a8 ♚a5+ 65.♔b8 After Black forces the king in front of the pawn, he can always approach with his own king. 65...♕f5-+

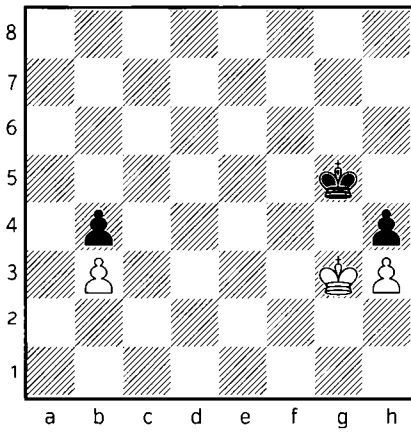
55...♕h4 56.♕g2

It looks like White is safe, but actually, the interesting part is just about to start.

56...b4! 57.♕h2 ♕g5 58.♕g3!

White cannot try to be tricky with 58.♕g2 because he loses the opposition after 58...♕f4 59.♕f2 h4! and the black king penetrates.

58...h4+



Black keeps on trying with the idea of distant opposition.

60. ♖g1!!

Only move! 60. ♖f2? loses to 60... ♖f6! Black gets the distant opposition. 61. ♖e2 ♖e6! White needs to decide which direction to go and the black king goes to the opposite one and wins. 62. ♖d2 (62. ♖f2 ♖d5 63. ♖e2 ♖e4-+) 62... ♖f5 63. ♖d3 (63. ♖e3 ♖e5-+) 63... ♖f4-+;

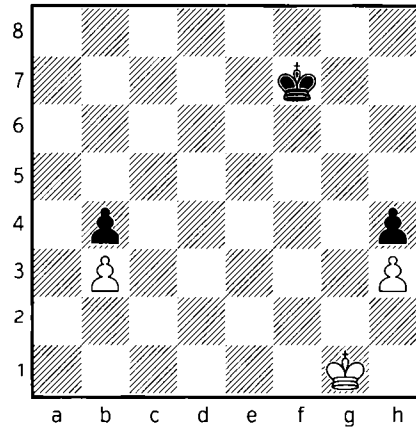
This is the critical moment! The fight for the opposition begins.

60. ♖f3? ♖f5 wins as shown above.

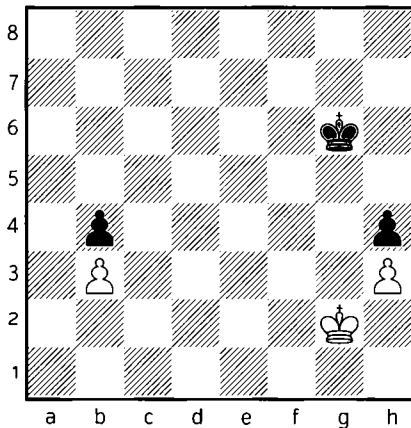
59. ♖g2!!

White uses the fact that Black cannot take the opposition by ♖g4. 59. ♖f3? loses after 59... ♖f5 ,wins as shown above.' 60. ♖e3 ♖e5 and, in the next move, the black king goes for one of the pawns... 61. ♖d3 (61. ♖f3 ♖d4-+ Black is faster and wins.) 61... ♖f4-+ also wins!

60... ♖g7 61. ♖g2 ♖g6 62. ♖g1 ♖f7!



59... ♖g6!



Black plays out all the cards, but White continues defending without mistakes.

63. ♖f1!!

Holding the distant opposition. 63. ♖f2 ♖f6-+ wins as it was seen in the 60. ♖f2 line.

63...♔e7

On 63...♔e6 White holds the opposition again by 64.♕e2 ♕e5 65.♕e3=

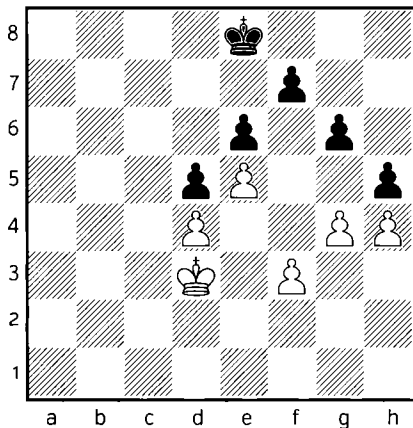
64.♕e1 ♕d7 65.♕d1 ♕e7 66.♕e1 ♕f7 67.♕f1

Black cannot make progress. A draw was agreed. An instructive endgame to remember.

1/2

4

▷ A. NAIDITSCH
▶ J. GRANDA ZUNIGA
ISLE OF MAN, 2015



A very suspicious endgame, because the white king has access towards the h5 pawn. However Black also has his resources. It is very instructive how Granda Zuniga holds the draw by

knowing the basic positions and using his calculational skills.

66.♕e3 ♕e7

66...hxg4 67.fxg4 ♕e7 would lead to the same.

67.♕f4

The best try is to hold the tension and approach towards the h5 pawn. After 67.gxh5 gxh5 68.♕f4 f6 White cannot invade.

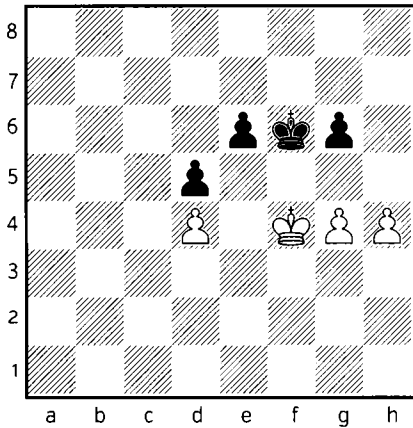
67...hxg4

The only move! 67...f6 loses to 68.exf6+ ♕xf6 69.g5+ ♕f7 70.♕e5 ♕e7 and White uses his spared tempo to set Black to zugzwang 71.f4! and the king is entering into Black's position.

68.fxg4 f6!

Black cannot allow the king to f6. 68...♕f8 69.♕g5 ♕g7 70.h5!+- White wins with his distant passed pawn. He enters with his king to f6.

69.exf6+ ♕xf6



White has two tempting options, but none of them lead to success.

70.g5+

Another try is 70.h5 creating a distant passed pawn, but it is met by 70...g5+! 71.♔e3 but Black keeps the draw by exchanging the e-pawn: 71...e5 72.dxe5+ ♟xe5 73.♔d3 ♟f6 74.♔d4 ♟e6 and White cannot improve his position any longer, only by pushing the h-pawn: 75.h6 (75.♔c5 can be met by 75...♟e5 and the black king is still in the square of the h5 pawn.) 75...♟f6 76.♟xd5 ♟g6 77.♟e6 ♟xh6 78.♟f6 ♟h7 79.♟xg5 ♟g7= draw by holding the opposition.

70...♟f7 71.♟g4

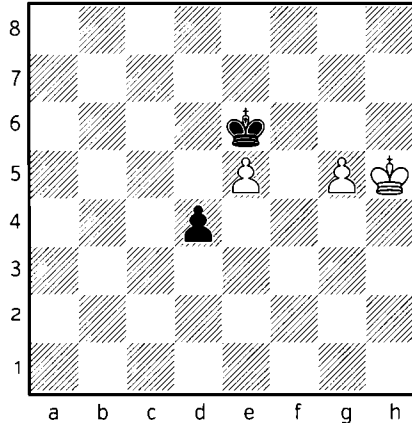
White want to play h5, after which the game would be over, but again Black finds the only move.

71...e5!

Other moves, for instance 71...♟g7 loses to 72.h5 gxh5+ 73.♟xh5+- followed by switsching back the king to e5 and winning with the distant passed pawn.

72.dxe5 d4!

The only move again that saves the game! It was easy to go wrong with 72...♟e6 73.h5! and now White is just in time: 73...gxh5+ 74.♟xh5 d4



75.g6 d3 76.g7 ♟f7 77.♟h6 ♟g8 78.e6 d2 79.e7 ♟f7 80.g8 ♚+ ♟xg8 81.e8 ♚#

73.♟f3

White has no time to execute the h5 break, he needs to catch the passed pawn.

73...♟e6 74.♟e4 d3 75.♟xd3 ♟xe5

We have reached a position, that we analysed in the 2 vs 1 pawn chapter. We can remember, that Black had to be careful to be able to meet ♟g4

with ♔f7 to be in time to play h5 gxh5 ♔xh5 ♔g7!

76. ♔e3 ♔f5 77. ♔f3 ♔e6 78. ♔f4 ♔f7

The only move again, but it is already easy. Others are losing: 78... ♔d6 would be a big mistake since after 79. ♔g4+- and h5 next wins. 79... ♔e6 80. h5 gxh5+ 81. ♔xh5 ♔f7 82. ♔h6 the arising pawn endgame is already winning for White.;

78... ♔e7 79. ♔e5+-

79. ♔f3 ♔e7 80. ♔e3 ♔d7 81. ♔d3 ♔e6 82. ♔e4

White keeps on trying a bit, but Black holds precisely.

82... ♔d6 83. ♔f3 ♔e7 84. ♔g4 ♔f7!

Correct! ♔g4 is met properly by ♔f7!

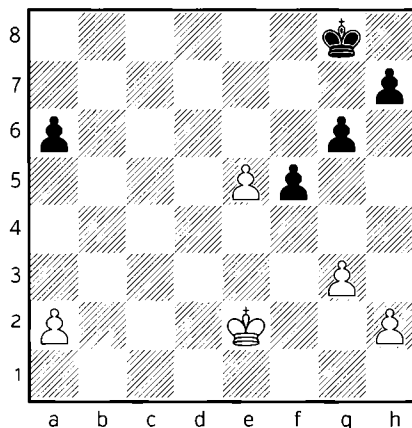
85. ♔g3 ♔e7 86. ♔f4 ♔e6 87. ♔g4 ♔f7 88. h5 gxh5+ 89. ♔xh5 ♔g7 90. g6 ♔g8 91. ♔h6 ♔h8 92. g7+ ♔g8 93. ♔g6

The perfect defense by Black yield him a draw from a vrey difficult endgame.

1/2

5

▷ S. IVANOV
▶ M. KRASENKOW
RILTON CUP, 2016



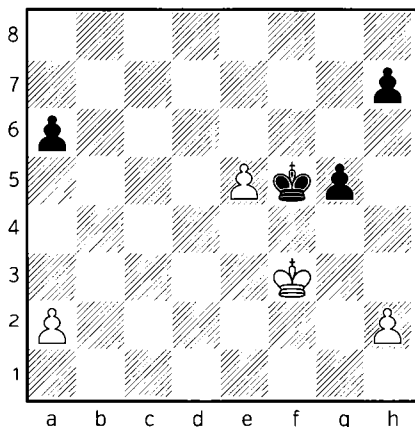
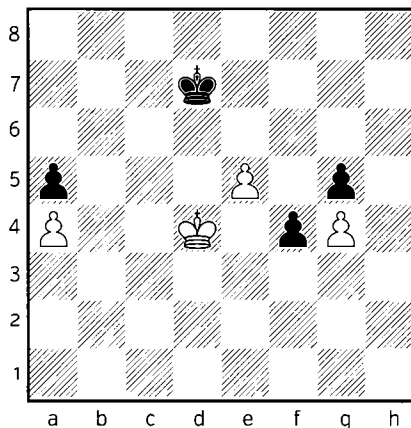
40... ♔f7

It is very interesting to analyze this pawn endgame. After a short look we can realize that the passed pawn on e5 is rather weak and it is Black who is going to have a distant passed pawn after g5 and later f4, therefore he is the one who is going to play for a win.

41. ♔e3?

This is the decisive mistake, but it was already very difficult to hold in a practical game. The only move was 41. ♔f3! g5! Black should prevent ♔f4, just like in the game, however the big difference is that White has the option of playing g4! (41... ♔e6 does not create real problems for White. 42. ♔f4 ♔d5 43. h4 ♔e6 The idea is to set White into zugzwang by simply

waiting with king moves and the e5 falls at the end, but White can create counterplay by going for the h7 pawn. 44. ♖g5 ♜xe5 45. ♚h6 and the game is drawn. 45...f4 46.gxf4+ ♜xf4 47. ♜xh7=) 42.g4! f4 A protected passed pawn is usually a big triumph in all the endgames, but here it is not sufficient to win the game. (The alternative is 42...♜e6 but White is just in time to save the game with 43.gxf5+ ♜xf5



44.e6! ♜xe6 45. ♜g4 ♜f6 46. ♜h5 and Black cannot save his extra pawn, ♜h6 is coming next and the game is drawn. 46...♜f5 47. ♜h6=) 43.h4 h6 44.hxg5 hxg5 45. ♜e4 White waits on the e4-d4-d3 squares with his king, giving protection to the e5 pawn and being close enough to the f-pawn. 45...♜e6 46.a3 a5 47.a4 ♜e7 (47...f3 48. ♜xf3 ♜xe5 49. ♜e3= White holds the opposition.) 48. ♜d4 ♜d7

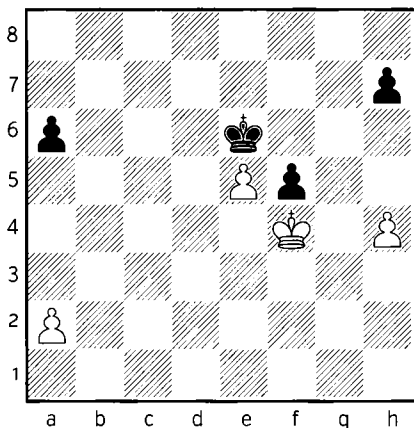
49. ♜d3!= It is very important to realize that White must play ♜e4 only when the black king goes to e6! (The reason is 49. ♜e4? ♜e6 50. ♜d4 White found himself in zugzwang and he had to go away from the f4 pawn which allows Black to win the opposition after 50...f3! 51. ♜e3 ♜xe5 52. ♜xf3 ♜d4-+) 49...♜e7 50. ♜d4!= avoiding again the ♜e4-♜e6 trap.

41...g5!

In the 41. ♜f3 ♜e6 line, we already saw that allowing the white king to go to f4 leads to a draw. 41...♜e6 42. ♜f4=

42.h3

White just realized that he should play g4, but he lost a decisive tempo. 42.h4 also loses: 42...gxh4 (42...h6 wins as well.) 43.gxh4 ♜e6 44. ♜f4



We have reached a position where the side who runs out of pawn moves loses. The one who needs to move with his king loses the f5 or the e5 pawn and the game. We have already learned, that in such cases a very important rule to ease our calculation is that both sides must push the pawns which have already moved. The pawn is already on a6, therefore Black must advance that pawn. (44. ♖d4 a5 leads to the same zugzwang positions as the 44. ♖f4 a5 line.) 44... a5! 45. h5 White also follows the principle, but it does not help him. (45. a4 h5 46. ♖g5 ♖xe5 47. ♖xh5 ♖f6 48. ♖h6 f4-+; 45. a3 a4 46. h5 h6-+) 45...a4!-+ Following the principles again! A clear example is that if Black plays 45... h6 instead, then 47.a4 wins for White! Now if White pushes h6, a3 wins, or in case of a3, h6 wins for Black.

42... ♖e6 43. ♖d4 a5!

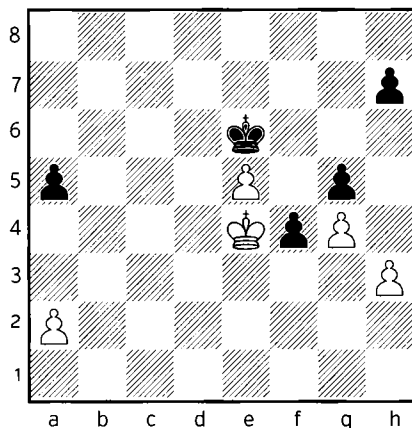
Krasenkov follows the same principle that we already know from the

42.h4 line. He moves the pawn which already left its initial position.

44.g4

44.a4 h5-+ is zugzwang for White.

44...f4 45. ♖e4



45...f3!

Precise calculation! It is important to save all the tempi (h6 and a4) for setting White into zugzwang in the future. 45...a4 allows White to play 46.h4 h6 47.hxg5 hxg5 48.a3 with the same draw that we already discovered in the 41. ♖f3 g5 42.g4 line!

46. ♖xf3 ♖xe5 47. ♖e3 a4!

But not 47...h6 because of 48.a4=

48.a3

48. ♖f3 ♖d4-+; White loses the pawn race after 48. ♖d3 ♖f4 49. ♖c4 ♖g3 50. ♖b4 ♖xh3 51. ♖xa4 ♖xg4 52. ♖b4

h5+ and the h-pawn promotes first and covers the a8 square.

48...h6!

The decisive tempo and White is lost!

49. ♖e2

49. ♖d3 ♖f4 is the same as in the 48. ♖d3 line.

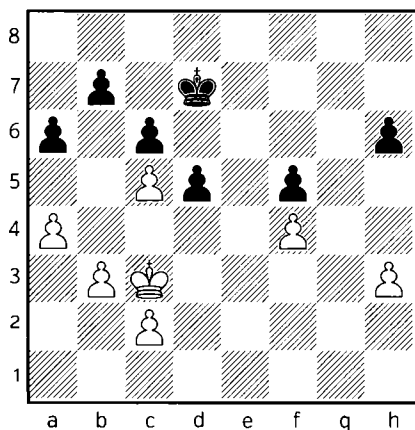
49... ♖e4 50. ♖f2 ♖d3 51. ♖f3 ♖c3 52. ♖e4

White resigned! An instructive end-game to learn from.

52... ♖b3 0-1

6

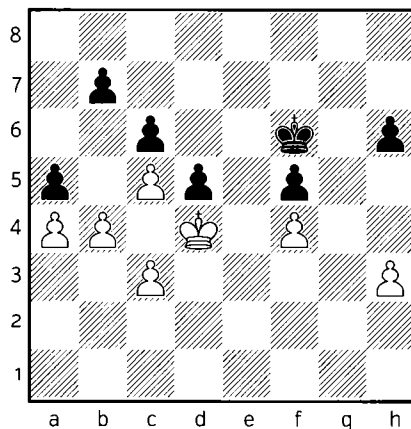
▷ M. CARLSEN
 ▶ HOU YIFAN
 WIJK AAN ZEE, 2016



45...h5?

Black commits a decisive mistake, as it allows White to break through on the queenside. White's win is straightforward and easy... Some very nice and instructive lines are coming if Black finds the only move 45...a5! It is clear, that White cannot break through on the kingside or in the center as the black king can always block the way. Therefore Black should have aimed for closing the queenside as well.

A) The other attempt is 46. ♖d4 ♖e6 47. c3 ♖f6 48. b4

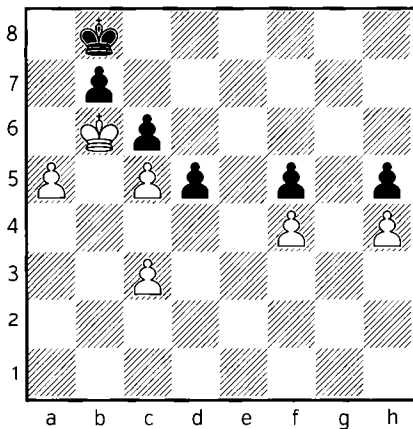


48... ♖e6! Black has to keep the queenside closed even if it costs a pawn. (48...axb4? loses to 49.cxb4 ♖e6 50.b5+- and White creates a passed pawn.) 49.bxa5 (49.b5 does not bring anything now, White cannot make a passed pawn. 49... ♖f6) 49... ♖f6 Black just waits, White still cannot break through on the queen-

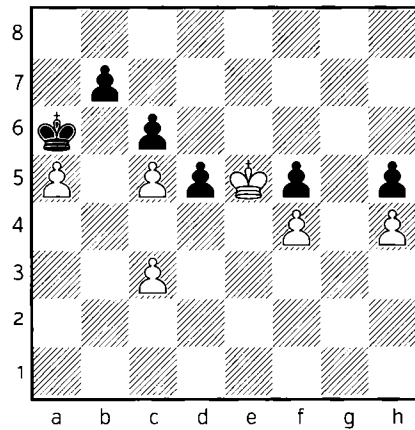
side. 50.c4 dxc4 51.♔xc4 ♕e6= Black holds 52.a6 bxa6 53.♖b4 ♖d5;

B) 46.b4 Trying to win with the same method as it happened in the game, but it is actually not the same here. Black even has two different ways to hold. One is very safe, while the other is rather study-like...

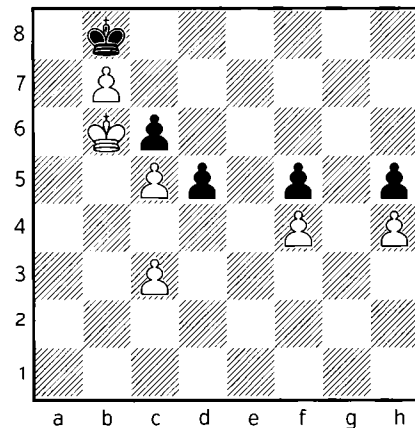
B1) 46...axb4+ 47.♖xb4 ♕c8 48.♔a5 ♖c7 is very similar to the game, but a little nuance makes the outcome different... 49.c3 White again needs to set Black into zugzwang to get his king to b6. 49...h5 50.h4 ♕c8 51.♖b6 ♖b8 52.a5



It seems to be over as a6 is coming next and White takes first on a6 and then he goes towards the c6 pawn...But 52...♔a8!! (52...♕c8 loses to 53.♖a7! ♖c7 54.a6! bxa6 55.♔xa6 ♖c8 56.♖b6 ♖d7 57.♖b7+- the standard technique.) 53.a6 (53.♖c7 also leads to forced draw after 53...♖a7 54.♖d6 ♖a6 55.♖e5



55...♖b5! Black cannot waste time on grabbing the a5 pawn. He must go directly towards the c3 to promote his d-pawn as soon as possible. 56.♔xf5 ♖c4 57.♖g6 ♖xc3 58.f5 d4 59.f6 d3 60.f7 d2 61.f8 ♖d1 ♔=) 53...♖b8!! This is the brilliant point! 54.axb7



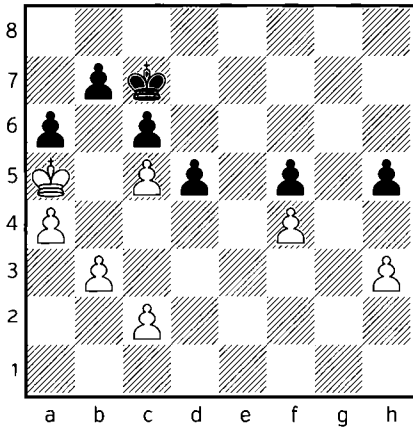
54...d4! 55.cxd4 and stalemate!;

B2) 46...♕e6 is the safe and easy 47.bxa5 ♖d7 and Black uses his king according to his opposition. If ♖d4-♕e6 or is ♖b4-♖c7, either way

blocking the entrance to his camp...

48. ♖b4 ♜c7=

46. ♖b4! ♜c8 47. ♖a5 ♜c7



White needs to win the tempo to get his king to b6.

48.h4!

The right move on purpose as it wins Black's tempo of pushing h4 himself.

48... ♜b8 49. ♖b6 ♜c8

The last part of the game requires only calculation. White needs to find the right moment of pushing b4-b5 with the idea of widening the space on the queenside for the king to break into the camp.

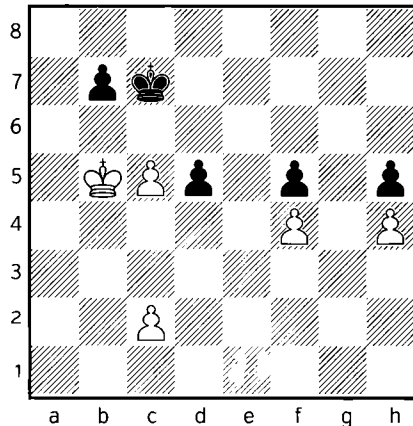
50.b4!

White should not waste time, he executes the plan right away. But not 50.c3? because White's going to miss this important c2-c3 tempo in the fu-

ture to set Black into zugzwang. 50...

♜b8 51.b4 ♜c8 52.b5 axb5 53.axb5 cxb5 54. ♜xb5 ♜c7 in comparison to the game, it is now White on move and he is in zugzwang. He cannot get back his king to b6.

50... ♜b8 51.b5! cxb5 52.axb5 axb5 53. ♜xb5 ♜c7



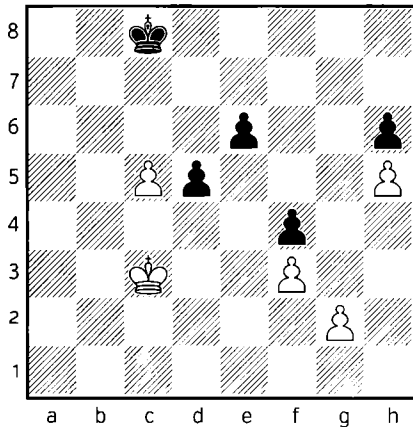
54.c3!

Winning the critical tempo! Black is in zugzwang. Black resigned in view of 54.c3 ♜d7 55. ♖b6 ♜c8 56.c6! Widening the space again! The stalemate trick does not work now because of 56... ♜b8 (56... bxc6 57. ♜xc6+- and the pawns start to fall.) 57.cxb7 d4 58.c4! d3 59.c5 d2 60.c6 d1 ♚ 61.c7#

1-0

7

▷ A. GIRI
 ▷ L. ARONIAN
 FIDE CANDIDATES, 2016



At first sight, Black has some problems, because he must eliminate the passed pawn on c5, but meanwhile White can collect the f4 pawn followed by g4-g5 breaking through. Black must calculate again move by move, everything is forced and actually he is just in time to save.

54. ♖d4 ♖d7 55. ♗e5 ♗c6 56. ♗xf4
 ♗xc5 57. g4

Unfortunately for White, he could not activate his king because it post stop Black's passed pawn. 57. ♗e5? d4

57... ♗d6!

Black must rush back to the corner. 57... d4? loses now to 58. g5 hxg5+ 59. ♗e4 ♗c4 60. h6 d3 61. ♗e3! Forcing

Black to step on the poisoned square 61... ♗c3 62. h7 d2 63. h8 ♖++- Check!

58. ♗e3

White removes his king from the check after break through with g5! 58. g5 hxg5+ 59. ♗xg5 ♗e7 Black reaches the corner and holds the draw.

58... e5!

Only move again! If Black prevents the break through directly with 58... ♗e7 59. ♗d4 ♗f6 he loses to 60. f4! ♗f7 61. ♗e5 ♗e7 62. f5! exf5 63. gx f5 ♗f7 64. ♗xd5 And we have studied this position in the 2 vs 1 chapter. When the black pawn is on h6, White wins by triangulation... 64... ♗f6 65. ♗e4 ♗f7 66. ♗e5 ♗e7 67. f6+ ♗f8 And here just to repeat 68. ♗e4! if ♗f7, then White already goes ♗f5 and Black is in zugzwang, ♗g6 wins next. 68... ♗e8 69. ♗f4 ♗f8 70. ♗e5! Black is on move and he is zugzwang! 70... ♗e8 (70... ♗f7 71. ♗f5+-) 71. ♗e6 ♗f8 72. f7 ♗g7 73. ♗e7+-

59. g5! ♗e7!

59... hxg5 60. h6+-

60. g6

60. gxh6 is harmless 60... ♗f7=

60... ♗f6 61. ♗d3

White tries to go behind the pawns through c3-b4-c5. 61.♔d2 makes no difference, Black sacrifices his pawn anyway with 61...e4

61...e4+! 62.fxe4 dxe4+ 63.♔xe4

We have reached the theoretical drawn position, that we have also studied in the 2 vs 1 pawns chapter. We can see, how these kind of theoretical positions might arise in a practical game.

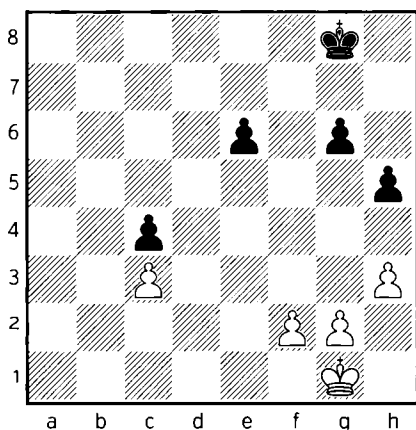
63...♖g7 64.♔f5 ♖g8 65.♔f6 ♔f8

Draw agreed.

1/2

8

▷ C. BALOGH
 ▷ Z. ILINCIC
 HUNGARIAN LEAGUE, 2009



In the next practical game, we will see many different motifs, that we discussed in the previous chapters. White has better pawn structure and the c4 pawn is a target. The first task is to activate the king.

42.♔f1 ♖f7 43.♔e2

Black has to defenses against the ♔e3-d4 plan. He can prevent it by e5-♔e6 or ♔f6-e5.

43...♔f6

This is the more stubborn defense. Black places his king in front of the pawn to be more active. If Black tries 43...e5 44.♔e3 ♔e6 45.♔e4 h4 (45...g5 46.g4 h4 47.f3+- Black is in zugzwang, ♔f5 or ♔d5 wins next move.) 46.g3 creating a distant passed pawn or after 46...g5 47.g4+- Setting Black again in zugzwang.

44.♔e3 ♔e5 45.h4!

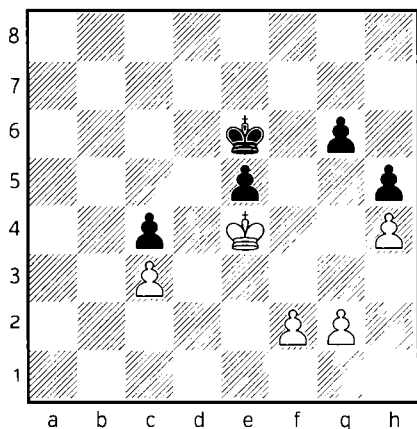
Taking away the g5 tempo. Black finds himself in zugzwang. He cannot allow ♔d4, therefore the only move is

45...♔d5 46.♔f4 e5+ 47.♔e3!

Provoking the e5 move is a big success for White as Black is in zugzwang again and he must allow ♔e4 next move. 47.♔g5? ♔e4 48.♔xg6 ♔d3 White cannot hurry up the promotion with a breakthrough 49.g4 (49.♔xh5 ♔xc3 50.g4 ♔d3) 49...hxg4

50.h5 Because Black suddenly does not promote his c-pawn, but he can create faster another passed pawn with 50...e4! 51.h6 e3 and the g-pawn promotes with check.

47...♔d6 48.♔e4 ♔e6



We are facing a calculation problem. White has two plans to make progress, either to widen the space towards the c4 pawn with f4 or trying to create a distant passed pawn with f3-g4. White can execute both plans with the black king on d6 or e6 as he has many reserved tempi at his disposal. There is only one way to win and it is definitely not the f3-g4 plan as we have studied it might run into the typical counterblow with g5, Black breaks through and he even wins the game.

49.f3!

White has to play f4 with the king on d6! He must also keep the pawn on g2, we will understand it later... 49.f4

right away fails to 49...exf4 50.♔xf4 ♔f6 51.g4 (51.♔e4 g5 52.g3 gxh4 53.gxh4 ♔e6 54.♔d4 ♔f5 55.♔xc4 ♔g4= and the pawns promote in the same time.; 51.g3 g5+! Only move! 52.hxg5+ ♔g6=) 51...hxg4 52.♔xg4 ♔g7 53.♔g5 ♔h7=

49...♔d6 50.f4!

The worst is 50.g3 ♔e6 51.g4?? which suddenly loses to 51...g5!-+ 52.hxg5 h4 53.♔e3 ♔f7 We have already seen the following line in the Welling-Eingorn game. 54.♔f2 ♔g6 55.♔g2 ♔xg5 56.♔h3 ♔f4 57.♔xh4 ♔xf3 58.g5 e4-+ 59.g6 e3 60.g7 e2 61.g8 ♖e1 ♖+ 62.♔h5 ♖h1+ 63.♔g6 ♖g1+ 64.♔h7 ♖xg8+ 65.♔xg8 ♔e3-+;

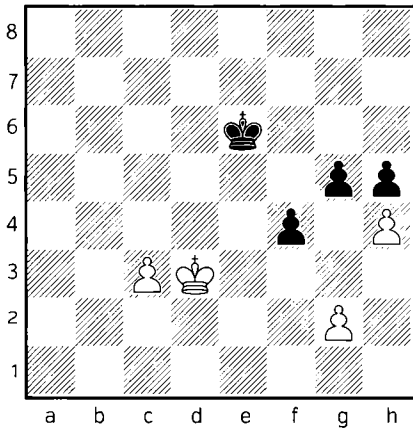
50.g4 ♔e6! (50...g5? does not work with the king on d6, because it is not in the square of the h-pawn. White promotes first after 51.gxh5 gxh4 52.h6+-) 51.gxh5 gxh5 52.f4 exf4 53.♔xf4 ♔f6= and the draw from the 49.f4 line.

50...exf4 51.♔xf4!

The right capture. 51.♔d4 also makes sense. The point would be to eliminate the c4 pawn and obtain a distant passed pawn after which the white king could switch back to the kingside. However it spoils the win 51... ♔e6! (The breakthrough with 51...g5? 52.hxg5 f3 does not work, as White is in the square of the h-pawn. Black must wait until the capture on c4. 53.gxf3 h4 54.♔e3+-) 52.♔xc4

A) White's plan would be successful after 52...♖f5 53.♗d3 g5 (53...♖g4 54.c4 ♖g3 55.♗e4+-) 54.hxg5! ♖xg5 55.c4 ♖f5 (55...h4 56.♗e2+-) 56.♗e2 ♗e4 57.c5 ♗d5 58.♖f3 ♖xc5 59.♖xf4 ♗d4 60.♖g5+-;

B) 52...g5! Black breaks through! 53.♗d3



(53.hxg5? loses to 53...f3! 54.gxf3 h4+-)

B1) 53...gxh4 54.♗e4 f3 55.♖xf3 ♗e5 (55...♖f5 56.c4 ♗e5 57.♗e3+-) 56.c4 ♗d4 57.♖f4 ♖xc4 58.♖g5 h3 Black can create an h-pawn, but he does not get back to the corner. 59.gxh3 ♗d5 60.♖xh5 ♗e6 61.♖g6 ♗e7 62.♖g7+- Shouldering,;

B2) 53...f3! Only move! 54.gxf3 gxh4 55.♗e2 White has two separated passed pawns, but they are not far enough advanced. 55...♗d5! Only move again! (55...♗e5? 56.♖f2 ♖f4 57.c4 h3 58.♖g1 ♗e5 59.♖h2 ♗d4 60.♖xh3 ♖xc4 61.♖h4 ♗d3 62.♖xh5 ♗e3 63.♖g4+- Pure calculation, eve-

rything is decided always by one tempo.) 56.♖f2 ♖c4 57.f4 ♗d5 58.♖f3 h3 59.♖g3 ♗e4= and Black can take the f4 pawn.

51...♗e6

On 51...♗d5 White spends his reserved tempo with 52.g3! This is the reason, why White had to keep it on g2 before the f3-f4 break. Setting Black in zugzwang 52...♗d6 53.♗e4 ♗e6 54.♗d4 ♖f5 55.♖xc4 ♖g4 56.♗d4 ♖xg3 57.c4 ♖xh4 (57..g5 58.hxg5!+- and White promotes his g-pawn with check!) 58.c5+- White promotes faster.

52.♗e4 ♖f6 53.♗d4

The race begins, but White is faster.

53...♖f5

53...g5 also loses to 54.♖xc4 gxh4 55.♗d4 ♖f5 (55...♗e6 56.♗e4+- win with the distant passed pawn!) 56.c4 ♖f4 57.c5 ♖g3 58.c6 ♖xg2 59.c7 h3 60.c8 ♖ h2 61.♖c2+ ♖g1 62.♖e3! h1 ♖ 63.♖f2#

54.♖xc4 ♖g4 55.♗d4 ♖xh4 56.c4 ♖g3 57.c5 ♖xg2 58.c6 h4 59.c7

Black reinsnged in view of 59.c7 h3 60.c8 ♖ h2 White can win because of two things. His king is close enough to set a mating net. As well as the presence of the g6 pawn on board, avoids Black to play on stalemate. We discuss this things in details at the queen

endgame part of the book. 61. ♖c2+ (61. ♖g4+ ♜f2 62. ♖h3 ♜g1 63. ♖g3+ ♜h1 No stalemate, therefore White wins by 64. ♖f2 g5 65. ♖f1#) 61... ♜g1 62. ♜e3 h1 ♖ 63. ♖f2#

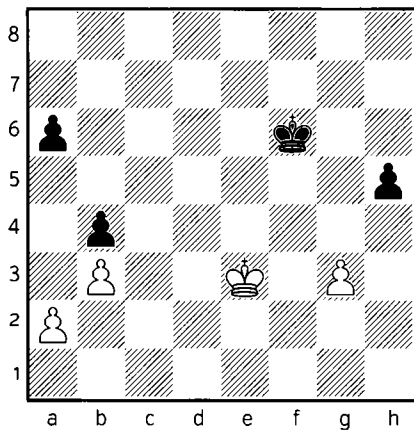
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9

▷ S. SARNO

▷ C. BALOGH

ZEMPLISKA SIRAVA, 2004



The material is balanced, but the black king is more active. Is it enough for the win, or it is just a symbolic edge? Black is actually winning and it is quite instructive why...The more active king and the reserved extra tempo with a6-a5 are playing the key role!

43... ♜e5!

Taking the opposition.

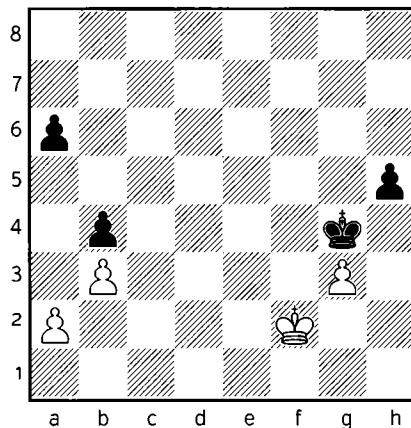
44. ♜d3

44. ♜f3 ♜f5 45. ♜f2 (45. ♜e3 transposes to the game.) 45... ♜e4 46. ♜g2 (46. ♜e2 a5 sets White into decisive zugzwang. 47. ♜f2 ♜d3 48. ♜f3 ♜c3 49. ♜f4 ♜b2 50. ♜g5 ♜xa2 51. ♜xh5 a4-+ Black is faster.) 46... ♜e3 47. ♜h3 a5 48. ♜h4 ♜f2 49. ♜h3 ♜g1!-+ The going behind the pawn technique. The game will have the same position...

44... ♜f5! 45. ♜e3

45. ♜c4 takes too much time to create a passed pawn after taking on b4 45... ♜g4-+

45... ♜g4 46. ♜f2



46... ♜h3!

Only the going behind the pawn technique wins, but all tempi must be calculated.

47. ♜f3 a5!

The key move! Black not only protects his b4 pawn which will be critical after the trade of the kingside pawns, but he also sets White into zugzwang. If it was Black's move ♖h2 could be met by ♕f2 and ♖h1 ♕f1 with a draw. White cannot stay now behind his own pawn, it is getting squeezed out...

48. ♕f2

48. ♕f4 would have saved a tempo for White, but he is still losing by one tempo. 48... ♖g2 49. g4 hxg4 50. ♕xg4 ♕f2 51. ♕f4 ♕e2 52. ♕e4 ♕d2 53. ♕d4 ♕c2 54. ♕c4 Here we can see, why the b4 pawn had to be protected. 54... ♕b2 55. ♕b5 ♕xa2 56. ♕xa5 ♕xb3--+

48... ♕h2! 49. ♕f3 ♕g1!

White resigned in view of 49... ♕g1 50. ♕f4 ♕f2 51. g4 hxg4 52. ♕xg4 ♕e3--+ and Black is much faster.

0-1

QUEEN ENDGAMES

In queenendgames, there are much less theoretical positions to know, it is more important to be familiar with the principles and some standard techniques.

We go into the details inside the different chapters, but we would like to mention several key topics in advance:

- ◆ Passed pawns are playing the most important role in the evaluation of a queenendgame. The side who has a more advanced passed pawn is usually the one who can play for the win.
- ◆ Activity is very important in queen endgames as well, just as in any other part of the game.
- ◆ Perpetual check and stalemate are the two most important resources for the defensive side.
- ◆ In queenendgames, we must always stay ready for king walks across to board. The shelter against the perpetual check can be often found behind or between the opponent's pawns.
- ◆ In queenendgames the quality of the pawns are much more important, than the quantity. An advanced passed pawn can easily worth more than many backward pawns.

CHAPTER 6

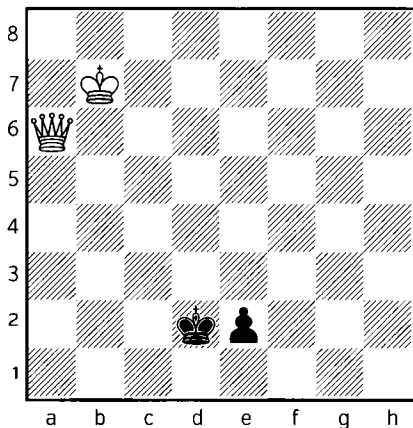
THEORETICAL POSITIONS WITH QUEEN VS PAWN

6.1. QUEEN VS ONE PAWN

This is a very important — must know — chapter. In the first part of it, we study the theoretical positions, then we take a look at some exceptions.

1

THEORETICAL POSITION



In case of central pawn, the side with the queen is always winning, regardless where his king is. By giving some checks, he can force the king to go in front of the pawn, when he gains a free move to approach with his king towards the pawn.

1. ♚a2+ ♔d1 2. ♚a1+ ♔d2 3. ♚d4+ ♔c1 4. ♚e3+ ♔d1 5. ♚d3+! ♔e1

The king was forced to go to e1 and now White can bring his king closer.

6. ♔c6 ♔f2

White must start from the beginning, he sends the black king in front of his pawn.

7. ♚d2 ♔f1 8. ♚f4+ ♔g2 9. ♚e3 ♔f1 10. ♚f3+! ♔e1

And now:

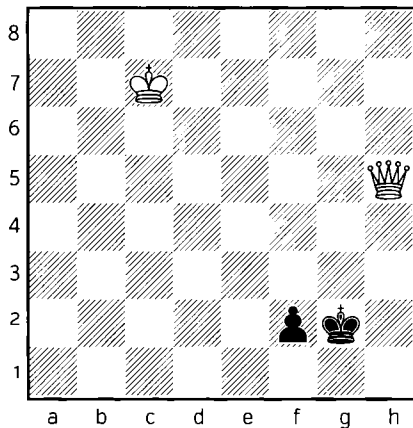
11. ♔c5

It is going like this until the white king picks up the e-pawn...

11...♔d2 12.♚f2 ♔d1 13.♚d4+ ♔c2
 14.♚e3 ♔d1 15.♚d3+ ♔e1 16.♔d4
 ♔f2 17.♚e3+ ♔f1 18.♚f3+ ♔e1
 19.♔d3+-

2

THEORETICAL POSITION



The side with the queen cannot win against the f- and c-pawn, unless his king is close enough to create a matenet. We discuss those cases in the second part of this chapter, now let's see why the same motif which was winning against the central pawn does not work here.

1. ♚g4+ ♔h1 2. ♚h3+ ♔g1 3. ♚g3+

and now the black king is not forced to go in front of the pawn, but he can play

3...♔h1!

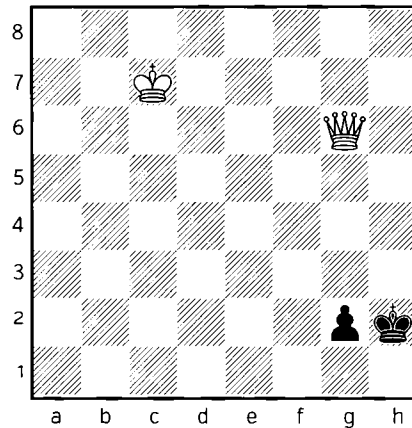
Because of this stalemate trick White cannot make progress and the game is drawn.

4. ♚xf2

Stalemate!

3

THEORETICAL POSITION



The situation with the g- and b-pawn is exactly the same as it was with the central pawn. White wins regardless how far his king is by the same technique of forcing the king in front of the pawn and then approaching with his own king.

1. ♚h5+ ♔g3 2. ♚g5+ ♔f2 3. ♚f4+ ♔e2 4. ♚g3 ♔f1 5. ♚f3+

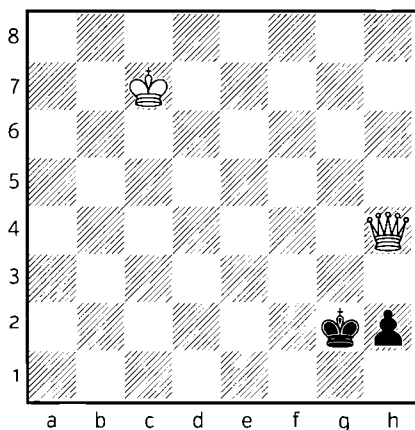
There are no stalemate tricks with the g-pawn.

5...♔g1 6.♕d6+-

And so on...

4

THEORETICAL POSITION



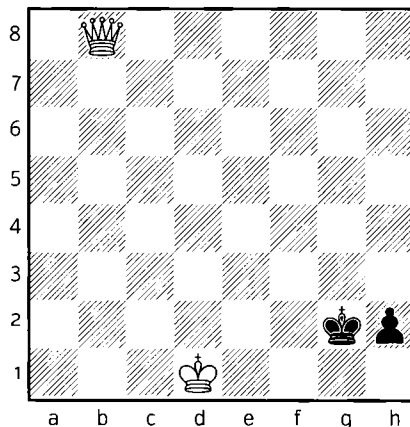
If the h- or a-pawn has reached the 2nd rank, the side with the queen is only winning if his king is close enough and he can create matenet. Otherwise the weaker side survives again thanks to another stalemate motif!

1. ♕g4+ ♔f2 2. ♕h3 ♔g1 3. ♕g3+ ♔h1!=

And the problem is if White brings his king closer, it is a stalemate, while after any other moves which let's the king leave from the corner, White does not make progress.

5

THEORETICAL POSITION



Despite Black has reached with his h-pawn the 2nd rank, he loses because the white king is close enough to create a matenet.

1. ♔e2!

The standard winning method. Another way to win is 1. ♕b2+! ♔f1 Black tries another stalemate, but of course White is not forced to take on h2. (1... ♔g3 2. ♕b7 followed by ♕h1 wins!) 2. ♕e2+ ♔g1 3. ♔e1! h1 ♕ 4. ♕f2#

1...h1 ♕ 2. ♕g8+ ♔h3

White needs to force the king to move to h2, he can achieve it by progressive queen checks.

3. ♕h7+ ♔g2 4. ♕g6+ ♔h3 5. ♕h5+ ♔g2 6. ♕g4+ ♔h2

And now:

7. ♖f2!+-

With an inevitable mate, Black does not have a useful check.

7... ♜f3+

With the hope of ♜xf3 stalemate, but of course

8. ♖xf3+-

1... ♙c3 loses to 2. ♜d4+ ♙b3 3. ♜a1+- Cutting the black king from the support of his pawn.;

1... ♙e2 2. ♜a2 ♙d1 Here comes the point of having the king close: 3. ♙d4! c1 ♜ 4. ♙d3+- and there is no way to avoid mate.

2. ♜g2!!

It is actually the only winning move. White uses this nice geometrical idea.

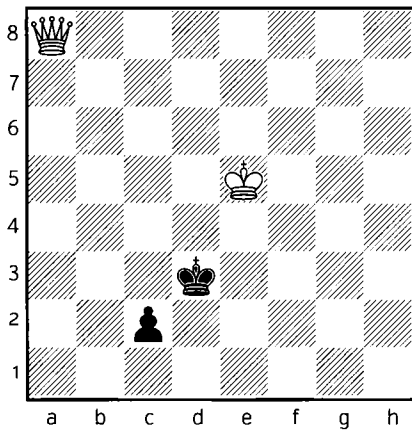
2... c1 ♜

2... ♙d3 3. ♜g5+- stops the pawn.

3. ♜g5++-

6

GRIGORIEV

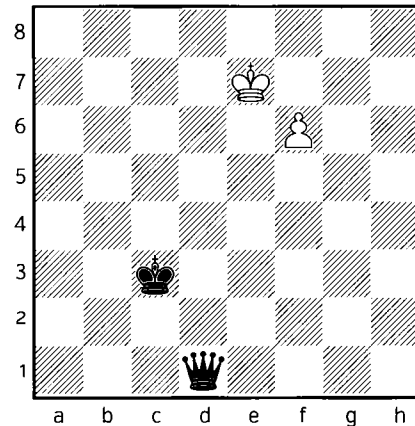


In the study of Grigoriev, the c-pawn has reached the 2nd rank, but White is still winning because of his king, which stands close enough to create mate nets.

1. ♜d5+! ♙e3

7

THEORETICAL POSITION



There could be exceptions if the queen and the king of the stronger

side are standing unfortunate. The f-pawn has not reached the 7th rank yet, therefore the win should be automatic, but Black is simple unable to force the king in front of the f-pawn.

1... ♕e1+

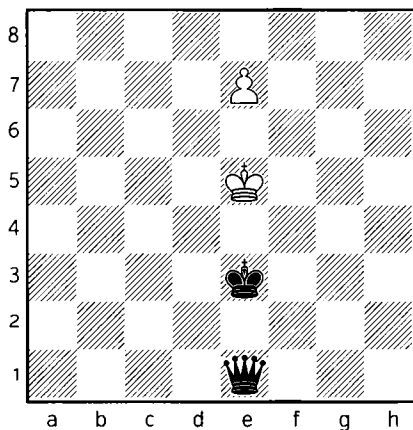
1... ♕e2+ 2. ♖f8= and Black cannot avoid f7 with an inevitable draw.

2. ♖f8

and f7 is coming next with a theoretical draw. Black cannot play ♕b4 because of his own king.

8

TROITZKY



In the study of Troitzky, White has a central pawn and he cannot promote it as he loses his queen after a king move with check. Additionally, we know, that the e-pawn is losing as there are no stalemate tricks. However the position is a miraculous draw, again because of the unfortunate placement of the black pieces.

1. ♖e6!!

White already wants to promote his pawn, which cannot be stopped by ♕a4 or ♕h5. Black must give a check, but the king cannot go to a good place from where it would not disturb his own queen in further checks.

1... ♖f4+

1... ♖d4+ 2. ♖d7=

2. ♖f7=

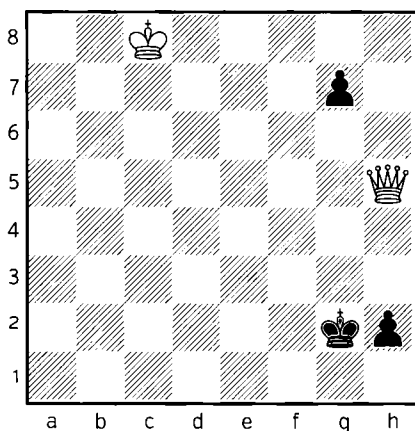
And promotion cannot be avoided.

6.2. QUEEN VS MORE PAWNS

In most of the cases, the queen is winning against two pawns, but as we will see, here again exceptions might occur.

1

THEORETICAL POSITION



As we have learned in the previous chapter, White cannot win against the h- and f-pawn without his king because of the stalemate motif. We should keep in mind, if we give an extra pawn to Black, the stalemate trick does not work anymore. White wins after

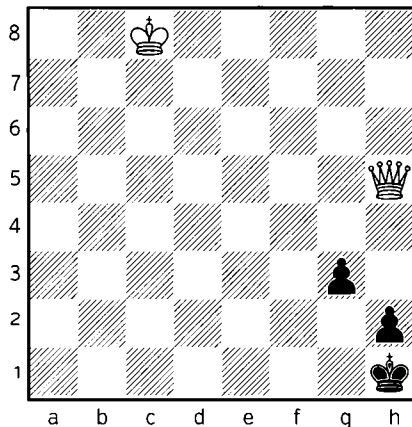
1. ♔g4+ ♚f2 2. ♔h3 ♚g1 3. ♔g3+ ♚h1

And there is no stalemate after

4. ♔f2! g5 5. ♔f1#

2

THEORETICAL POSITION



Compared to the previous example, the g-pawn is too far advanced and Black holds the draw. However he must still avoid a last trap:

1. ♔f3+

Also after 1. ♔e2 ♚g1 must be played.

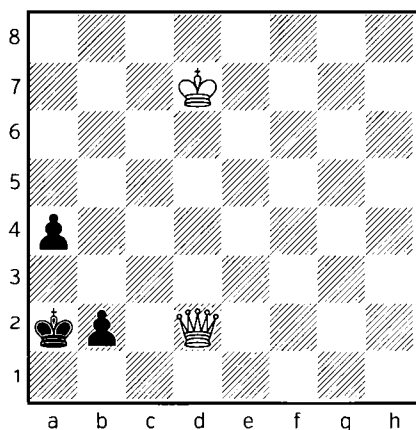
1... ♚g1!

Only this move and Black either promotes his h-pawn or after eliminating the g3 pawn, stalemate exists again. 1...g2 falls into the trap: 2. ♔e4! Black finds himself in zugzwang and he must move into mate in one. 2... ♚g1 3. ♔e1#

2. ♔xg3+ ♚h1=

3

GRIGORIEV



In the study of Grigoriev, White only wins because his king enters into the battle just in time.

1. ♔c6! ♕a3

1... ♕a1 also loses to 2. ♖d4 a3 3. ♔b5 ♕a2 4. ♖d2 ♕a1 5. ♖c3+- and we transpose to the mainline.;

1...a3 also transposes to the main line after 2. ♕b5+-

2. ♖c3+ ♕a2 3. ♖c2

Black must waste a tempo on saving his a-pawn, as otherwise the single b-pawn is losing.

3...a3 4. ♕b5 ♕a1 5. ♖c3 ♕a2

5...a2 is met by 6. ♖d4! ♕b1 7. ♖d1#

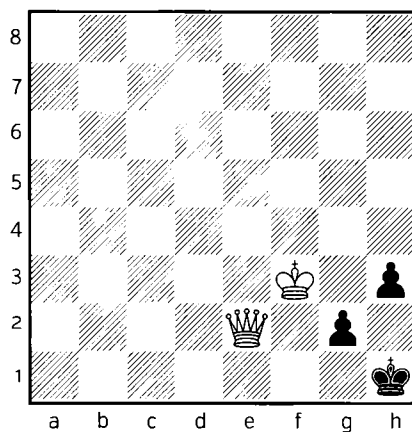
6. ♕a4!+-

This is the point of the study!

6...b1 ♖ 7. ♖xa3#

4

▷ W. NAPIER
▶ F. MARSHALL
NEW YORK, 1896



White cannot avoid the promotion of the g-pawn, but might try to create a mate net as he king is very close. Is it enough for the win?

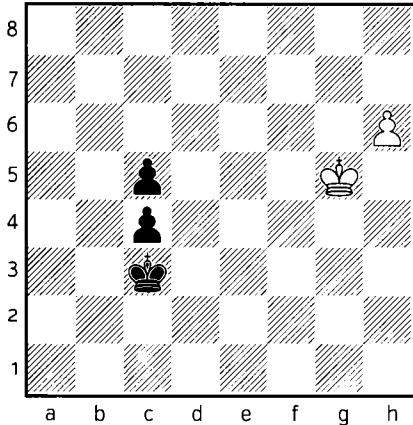
73. ♕g3 g1 ♖+ 74. ♕xh3 ♖e3+!!

This pretty stalemate trick saves Black from the defeat!

75. ♖xe3= 1/2

5

▷ Y. QUESADA PEREZ
▷ S. RAJDEEP
KOLKATA, 2015



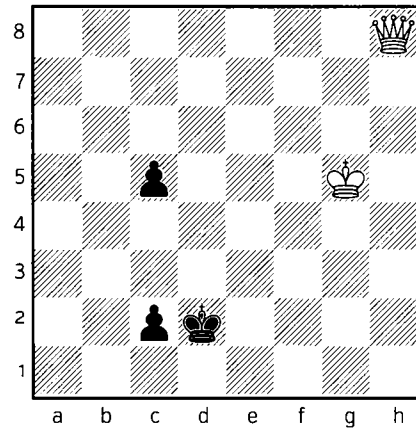
In a recent study-like game, Black has found very clever saving idea...

55...♔d2!

Other moves are losing: 55...♔b3 56.h7 c3 57.h8♚ c2 58.♚a1+- and the pawns are stopped.;

55...♔b2 56.h7 c3 57.h8♚+- pins the pawn.

56.h7 c3 57.h8♚ c2



Surprisingly, this position is a draw! Without the c5 pawn we would have the famous theoretical draw due to the stalemate idea. We could think that the c5 pawn is actually an ill pawn, which prevents Black from playing for the stalemate motif. However it controls the very important d4 and b4 squares and without those White is unable to squeeze the king to c1 to win time in order to bring the king closer.

58.♚b2 ♔d1 59.♚b3 ♔d2 60.♚a2 ♔d1 61.♚d5+ ♔c1

Finally Black is not threatening to promote his pawn, which gives White a free tempo to improve his king. 61...♔e2 was equally good, as it will lead to the same lines.

62.♔f4

White uses the moment, that he can bring his king a square closer, but it is not enough to win the game.

62...♔b2 63.♚e5+ ♔b1 64.♚e4 ♔b2

White is simply unable to make progress without the checks on b4 or d4.

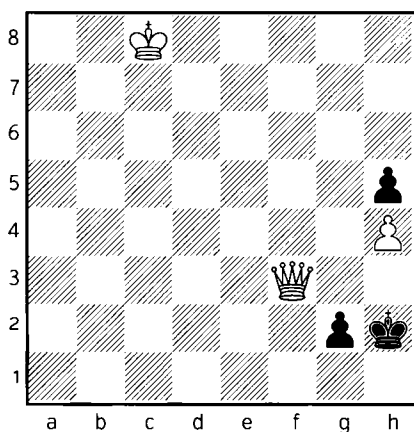
65.♚e2 ♔b1 66.♚b5+ ♔a2 67.♚a4+ ♔b2=

White should play ♚b4 ♔a2 ♚c3 ♔b1 ♚b3, but it simply does not work. Therefore this entire endgame with the c2-c5 pawns is a draw!

1/2

6

THEORETICAL POSITION



This position is a bit similar to the previous example. White would win against a single g-pawn, but he cannot force the king to go in front of it because of lacking the option to give a check on the h4 or g4 squares with the queen.

1. ♚f2

White cannot trade queens to win the pawn endgame after 1. ♚xh5 g1♚ =

1... ♔h1 2. ♔d7

A clever attempt to simplify into a winning pawn endgame, but White just fails by one tempo.

2... g1♚ 3. ♚xg1+ ♔xg1 4. ♔e6 ♔f2 5. ♔f5

As we already know from the pawn endgame part from the book, the game is drawn after

5... ♔e3 6. ♔g5 ♔e4 7. ♔xh5 ♔f5=

CHAPTER 7

THEORETICAL POSITIONS WITH QUEEN + PAWN VS QUEEN

The defensive side should place his king in front of the pawn and then it is usually an easy draw, regardless on which line and how far advanced the pawn is.

However in most of the cases, the circumstances do not allow him this option. And now we reach an extremely difficult topic. For the computers everything is obvious, but for a human it is very hard to understand anything from what is going on. I would never wish to anyone to defend such an endgame, because the longest games in the database are usually arising from this kind of games. Usually after 30-40 moves, the stronger side advances his pawn, then another 30-40 moves followed by another push. Like this it can easily reach 100-150 moves and it is a huge torture to suffer for the defensive side.

Once again, we speak about positions when the king of the defensive side is squeezed out from the front of the pawn, while king of the stronger side is next to his pawn.

In most of the practical cases this kind of endgames arise with h- or g-pawn and this is also the more dif-

ficult story. Most of the positions with f- or -e pawns are just simple winning, because the king has more space on both sides of the pawn to hide from the checks.

Now we arrive to the g- and h-pawn. Before going to the concrete examples, we would like to give some general advices for both the attacker and the defender side.

Advices for the side with the extra pawn:

- ♦ Try to centralize the queen. For example: With a pawn on g7, put the queen on e5
- ♦ Try to hide the king from the checks on the same line/rank or one line/rank up or down where the other king is. For example, with a pawn on g7 and the black king is on a4, go with the king to h5-h4-h3 with a centralized queen. The reason is, most of the checks will can be prevented by a countercheck.

Advices for the defensive side:

- ♦ Most important is, try to go with the king to the opposite corner to the pawn. For example: With

the pawn on g7 or h7, go with the king to b1 or a2 followed by giving as many checks as possible. Like this, the attacking side has much smaller chance to avoid perpetual check, because he cannot play on interfering his queen with countercheck.

- ♦ Don't lose concentration, because one wrong check or another kind of mistake can be decisive.

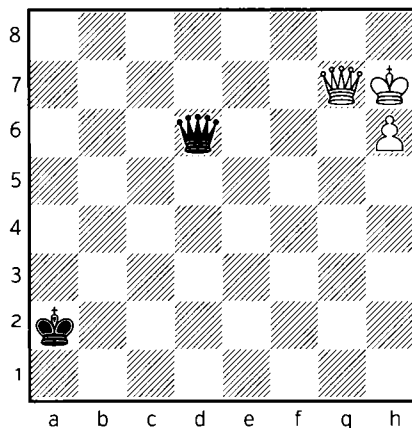
Time to switch from the principles to the concrete positions to understand more easily what we speak about.

7.1. H-PAWN

The defensive side has two options. The optimal is to have the king on the opposite corner and give as many checks as possible. The other one is to try to squeeze the king to the corner, like we will see in the Dominguez-Nakamura game. With perfect defense, the game should end in draw.

1

PRACTICAL POSITION



The following illustrative example shows well why is it optimal for the king to stay on the opposite corner of the board.

1. ♚f7+

Using the fact, that the king cannot go to b1, but he still stays close to the corner.

1... ♔b2 2. ♚f5

An attempt to let the h-pawn go immediately runs into many checks. Black must be careful to not miss ♚f6 countercheck 2. ♔g7 ♚g3+ 3. ♚g6 ♚c7+ 4. ♔f6 ♚d6+ 5. ♔f5 ♚d3+ 6. ♔g5 ♚g3+ White cannot make progress like this. That is why, he should rather place his queen to the center, then the defensive options are much more limited.

2...♔a2

Black goes back to the ideal square and waits with the check until the king does not leave the h7 square.

3.♔g7

Black must avoid to miss ♕f7 countercheck.

3...♕g3+ 4.♔f6 ♕h4+ 5.♕g5 ♕d4+
6.♕e5

The white queen gets fully centralized.

6...♕h4+ 7.♔g6 ♕g4+ 8.♔f7 ♕d7+
9.♔f6

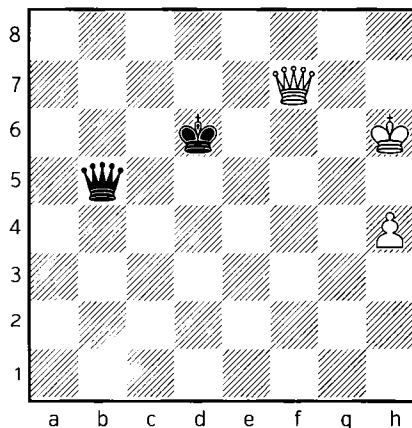
Black must pay attention on the ♕e6 countercheck, but he can give

9...♕d8+ 10.♔f5 ♕d3+ 11.♔f4 ♕f1+
12.♔g3 ♕g1+ 13.♔h3 ♕f1+

etc. White cannot make progress like this.

2

▷ L. DOMINGUEZ PEREZ
▷ H. NAKAMURA
THESSALONIKI, 2013

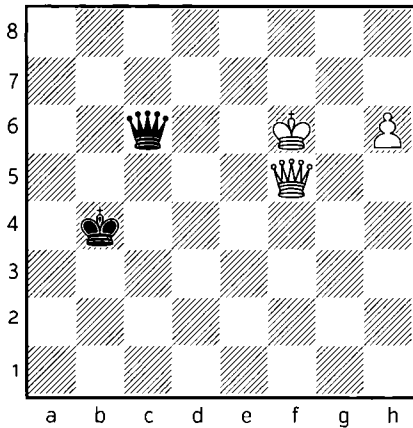


Now, let's study what could happen if Black does not manage to set up the ideal defense with the king on a2-b1. Dominguez plays the most natural move, but it turns the position from winning to drawn...

60.h5?

60.♔g7! was the winning move. The game will demonstrate that White should not let the black king get to e5! 60...♕e2 (60...♔e5? does not work now because of 61.♕h5+!) 61.h5 Black again cannot play ♔e5 because of the check on the e-file. White's king is protected by all the checks with the counterchecks. Let's examine the win in case of the most tenacious defence. 61...♔c5! Black tries to run to a2-b1 with his king, from where it is

the most distant from the counterchecks. 62. ♖f5+ ♔b4 63. h6 ♖g2+ 64. ♕f6 ♖c6+



65. ♕g5! White's winning technique is always connected with the placement of the black king. He must try to shelter his king from the checks with the countercheck ideas. Once again Black has no good check. 65... ♕a3 66. h7 ♖g2+ 67. ♕h4! Here is another case where Black has no good check. Black is forced to stop the h-pawn. 67... ♖g7 68. ♕h5 ♕b2 69. ♖g6 ♖e5+ 70. ♕g4 ♖d4+ 71. ♕h3 The king is heading to h1! The idea is the same as before: to prevent all checks by counterchecks... 71... ♖e3+ 72. ♕g2 ♖d2+ 73. ♕h1 Here we are again. All the checks on the first rank are met by ♖g1 and there is no more check because of ♖g2 or ♖h2! 73... ♖d4 74. ♖g3!+- White creates the threat of ♖h2 and h8 ♖. Black has no good checks, while ♖h8 is met by ♖g8.

60... ♕e5!!

The game is drawn now, but Black needs to continue defending precisely!

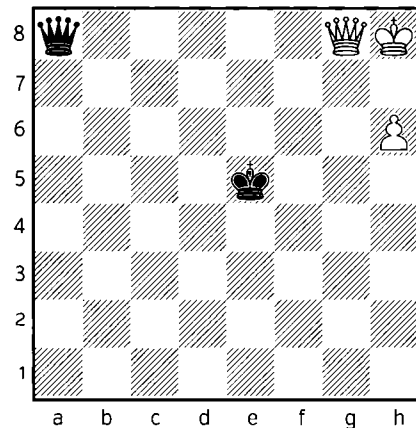
61. ♕g7 ♖c6!

Another only move! It is important to put the queen on the h1-a8 diagonal to annoy the Black king with many checks, without having to be afraid of a countercheck. 61... ♖b6? loses to 62. h6 ♖g1+ 63. ♕f8 and Black has no more check.

62. h6 ♖g2+ 63. ♖g6 ♖b7+ 64. ♖f7

One of the points behind the ♕e5 idea becomes clear after: 64. ♕f8 Black can continue checking 64... ♖a8+ because 65. ♖e8+ allows 65... ♖xe8+! 66. ♕xe8 ♕f6=

64... ♖g2+ 65. ♕h8 ♖a8+ 66. ♖g8

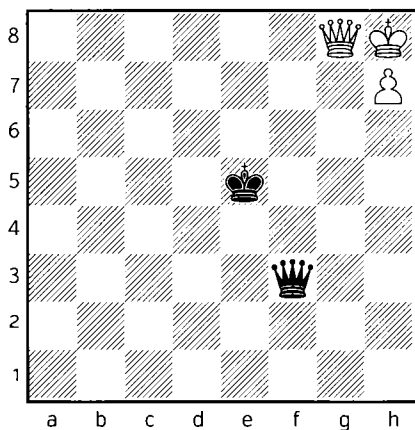


66... ♖f3!

Black would like to squeeze the king into the corner on h8. In many cases he is ready to trade off the queens.

67. ♖g6

The critical move was 67.h7!



Black needs to find only move to hold, but I am quite sure that Nakamura would have played it. 67... ♗h5!! Black would like to play ♖f6 or ♖e6 with the idea of ♗f7 (just like in the game), and the h5 square is the only one from where he does not need to be afraid of checking the queen. (For instance after 67... ♗f5 68. ♗b8+! Black cannot play ♖f6 or ♖e6 because of ♗f8 and ♗c8 followed by exchanging the queens. 68... ♖d4 69. ♗b4+ ♖e3 70. ♗e7+ ♖d2 White is winning here with the technique we have already examined before. He leaves with the king from h8 and protects it from the checks with the use of the Black king. 71. ♖g8 ♗d5+ 72. ♖f8 ♗f5+ 73. ♖e8 ♗h5+ 74. ♖d8 ♗a5+ 75. ♗c7! ♗g5+ 76. ♖c8+- And Black has no more checks.) 68. ♗b8+ ♖f6 Black holds the draw, just like in the game.

67... ♗f8+ 68. ♖h7 ♗f3 69. ♗g7+ ♖e6

Black has an easy draw from now on. He wants to put his queen on f7 or f8, keeping the White king in front of his pawn.

70. ♖g8 ♗h5!

Nakamura shows that he would have been familiar with this idea in the 67.h7 line as well.

71. h7 ♗e8+ 72. ♗f8 ♗g6+ 73. ♖h8 ♗f7!

The black king is squeezed and the draw is inevitable.

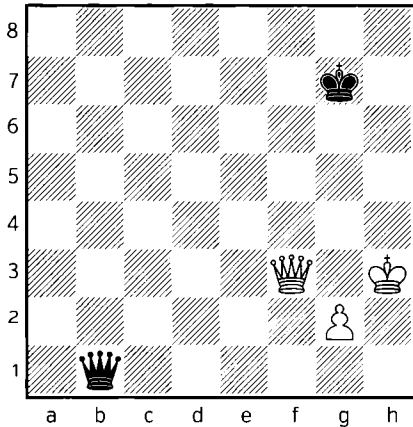
74. ♗c8+ ♖e7 75. ♗c7+ ♖e8 76. ♗e5+ ♖d7 77. ♗b5+ ♖e7 78. ♗g5+ ♖e8 79. ♗g8+ ♗f8 80. ♗xf8+ ♖xf8 1/2

7.2. G-PAWN

We examine how does it look like in practice what we described in the introduction of the 7th chapter. I would like to draw your attention on the Botvinnik-Minev game. That was the first time when this type of end-games were analysed on the highest level. The great Champion has made a very deep study during the adjournment of his game.

1

▷ M. CARLSEN
▷ L. ARONIAN
ELISTA, 2007



This is the ideal situation for the defensive side. His king is standing in front of the pawn. The position is an easy draw, but still Carlsen manages to trick Aronian somehow...

72. ♔h4

Until the pawn is on g2, Black should not blunder the trade of queens, because he can hardly fight for the opposition till White has a g3 tempo.

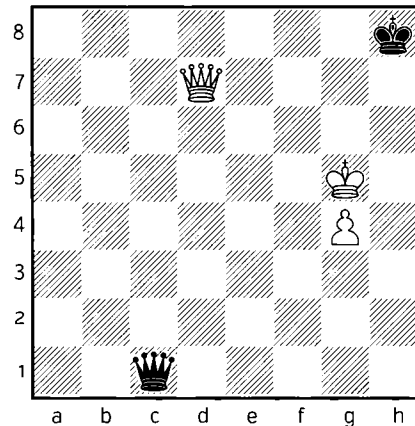
72... ♔h7 73. ♚f7+ ♔h8 74. ♚h5+ ♔g7 75. ♚g4+ ♔h7 76. ♚h5+ ♔g7 77. ♚e5+ ♔h7 78. ♚d5 ♔g7 79. ♚d4+ ♔h7 80. ♚d7+ ♔h8 81. g4

Carlsen finally moves with his g2 pawn, but now checks are coming.

81... ♚h1+

It was more accurate to give 81... ♚e1+ 82. ♔h5 ♚e5+ with an inevitable draw. A pretty finish could be 83. g5 ♚e2+ 84. ♔h6 ♚e6+! ♚h2 followed by ♚c2 was also draw, but this is nicer of course. 85. ♚xe6=

82. ♔g5 ♚c1+??



Strange, but this is a decisive mistake.

82... ♚e4 or many other moves would have led to draw.

83. ♔g6!

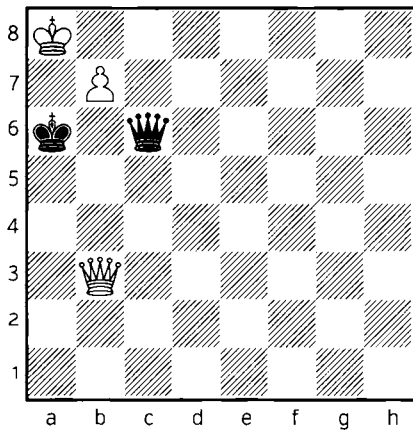
Black suddenly finds himself in mate net and he soon runs out of chess.

83... ♚b1+ 84. ♚f5

Black resigned as he has no more checks because of ♚f6 countercheck and otherwise Black gets mated.

1-0

2

VAN VLIET
1888

The beautiful study of Van Vliet shows why is it dangerous to have the king close to the pawn.

1. ♖b4!!

After this subtle cold-blooded move, Black finds himself in zugzwang. All moves have a concrete tactical problem.

1... ♜h1

All other moves are losing to the same motif. 1... ♜d5 2. ♖a4+ ♜b6 3. ♖b3+!! ♜xb3 4. b8 ♜+++;

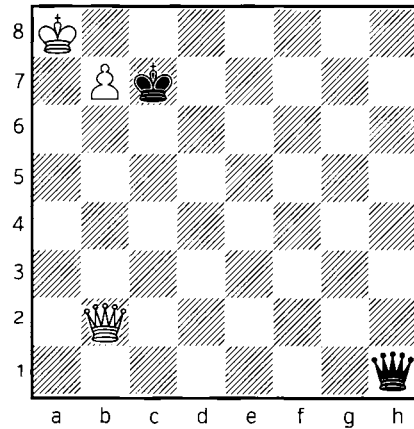
1... ♜f3 2. ♖a4+ ♜b6 3. ♖b3+! ♜xb3 4. b8 ♜+ ♜a6 5. ♖xb3+-;

1... ♜g2 2. ♖a3+ ♜b6 3. ♖b2+! ♜xb2 4. b8 ♜++-

2. ♖a3+ ♜b6

2... ♜b5 loses to 3. ♖b2+ ♜c4 4. ♜a7+-

3. ♖b2+ ♜c7



3... ♜a6 is refuted by the already known motif 4. ♖a2+ ♜b6 5. ♖b1+! ♜xb1 6. b8 ♜+++;

3... ♜c5 loses to 4. ♜a7 ♜h7 5. ♖b6+ ♜d5 6. ♜a6+- and the pawn promotes as ♖d3 check is met by ♖b5.

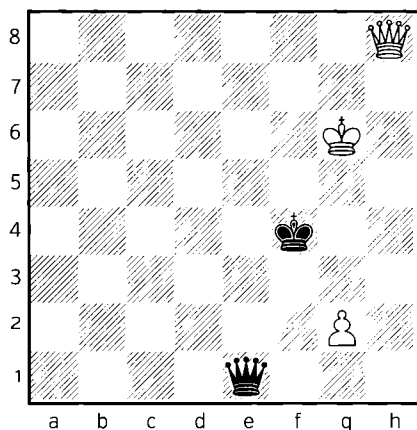
4. ♖h2+!!

The same tactical blow like before, just now executed diagonally.

4... ♖xh2 5. b8 ♜+ ♜c6 6. ♖xh2+-

3

▷ B. GELFAND
 ▶ B. JOBAVA
 DORTMUND, 2006



Here is another concrete example from the highest level, which shows how difficult are these endgames. White has to show some technical moves to not lose his g-pawn. Perhaps it is a bit surprising, but the objective evaluation of this endgame is winning for White. The reason is the bad position of the black king. If it was on a2, the game was drawn. For us with the current technology is easy, it shows in case of perfect play White wins in 58 moves.

14. ♖b8+! ♔g4 15. ♖c8+! ♔g3
 16. ♖h3+ ♔f4 17. ♖f5+ ♔g3 18. ♖h3+
 ♔f4 19. ♖f3+ ♔e5 20. g4!

Well played by Gelfand. The black king is standing poorly, but Jobava has some time now till White ad-

vances his pawn, therefore he tries to get it to its optimal place.

20... ♔d4

Heading towards a2, but it cannot cross the 3rd rank for the moment. The best he can do is to go to b4 and try to deflect the white queen by giving some checks.

21. g5 ♖e8+ 22. ♔g7 ♖e7+ 23. ♔h6
 ♔c4 24. ♖f4+

Taking control over the h4 square.

24... ♔b5

Black should have played 24... ♔b3 although his position is losing after 25. g6 Jobava refused to play ♔b3, because now the pawn reaches the 7th rank as the standard way to stop it by pinning with ♖e6 loses to ♖f7!

25. g6 ♖e6 26. ♔g5

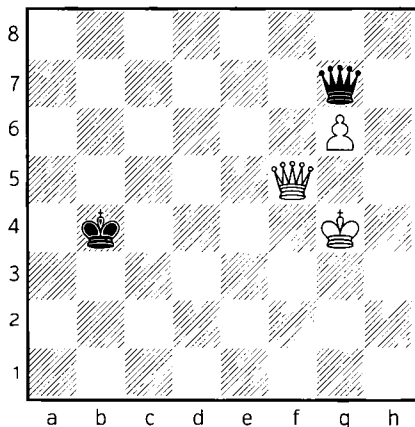
It was more precise to control the board with the powerful queen in the center. 26. ♖d4! ♖h3+ 27. ♔g5 ♖g3+ 28. ♔f6 ♖f3+ 29. ♔e7 ♖e2+ 30. ♔d8+- Black ran out of the checks, thanks to the queen on d4 and g7 is coming soon.

26... ♖e7+

White objectively should have redo to position with ♔h6 ♖e6 and play ♖d4.

27. ♔g4 ♚g7 28. ♚d6

28. ♚f5+! ♔b4



29. ♚f7! was the right move now. A very nice example, why the white king should be placed on the same line/rank as the other king. Now ♚d4 can be met by ♚f4.

28... ♔a4!

The most tenacious defense.

29. ♔f5 ♚c3 30. ♚e5 ♚h3+ 31. ♔g5 ♚g2+ 32. ♔f5 ♚h3+ 33. ♔f6 ♚f3+ 34. ♚f5 ♚c3+ 35. ♔g5

Of course we do not criticize the players for making mistakes, but a question mark could be given because of the objective evaluation, which is ♚e5 and ♔f7 are winning and the text move is a draw. A full book could be written and I believe the reasons would still remain unclear for us, but it is more important to know the basic ideas.

35... ♔a3!

Both players are familiar with the general ideas. Only ♔a3 and ♔b3 are good, any other moves were losing.

36. ♚f8+ ♔a4?

This is strange, now White is winning again. Why not 36... ♔a2 if it is possible.

37. ♚a8+

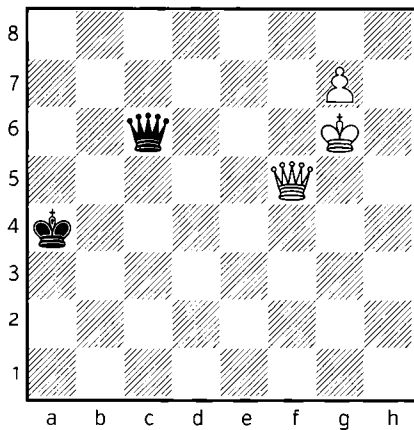
The only winning move was 37. ♔g4! making use again of the bad placement of the black king.

37... ♔b4 38. ♚b7+ ♔a5

Once more wrong way 38... ♔a3!= should have been played.

39. g7 ♚e5+ 40. ♔g6 ♚e6+ 41. ♔h7 ♚f5+ 42. ♔g8 ♔a4

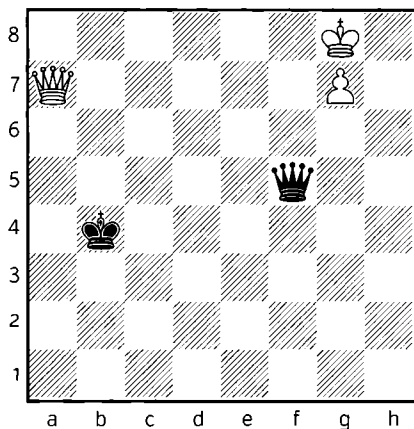
Black runs out of checks after 42... ♚e6+ 43. ♔f8 ♚f6+ 44. ♔e8 ♚e6+ 45. ♚e7! Using the fact, that there is no check on c8. Another illustration why the black king should be far from the actions, otherwise always this kind of counterchance are existing. 45... ♚c6+ 46. ♚d7 ♚e4+ 47. ♔d8 ♚a8+ 48. ♔e7 ♚e4+ 49. ♚e6 ♚b4+ 50. ♔f7 ♚f4+ 51. ♚f6 ♚c4+ 52. ♔g6 And no more checks again, thanks to the a5 king, White has countercheck with ♚f5 or ♚g5. The winning line continues with 52... ♔a4 53. ♚f5! ♚c6+



54. ♔g5 no more checks again because of ♚f4 or ♛g4 countercheck. 54... ♛e8 55. ♛c2+ ♔b4 56. ♛b2+ and the pawn promotes after ♛a2 check or if 56... ♔c5 57. ♛c3+ ♔d6 58. ♛d4++- and ♛c4 check wins next. Of course, we do not expect anybody to play like this, we just show the ideas.

43. ♛h1

The winning move was 43. ♛a7+! ♔b4



44. ♛f7! Black has no checks 44... ♛g4 45. ♛d5! Centralization! 45... ♔a3

46. ♔f7 ♛f4+ 47. ♔g6 ♛g4+ 48. ♔f6 ♛f4+ 49. ♛f5 ♛d6+ 50. ♔g5 The king is coming to the 3rd, from where it will be protected by counterchecks. 50... ♛g3+ 51. ♛g4 ♛e5+ 52. ♔h4 already no checks from h2 or e1. 52... ♛f6+ 53. ♛g5 ♛d4+ 54. ♔h3 and the last check is 54... ♛d7+ 55. ♛g4!+- and the pawn promotes!

43... ♛c8+

Only 43... ♔b3; And 43... ♔a3 were leading to draw.

44. ♔h7 ♛f5+ 45. ♔h8 ♛e5 46. ♛h3!+-

An excellent move! White brings his queen closer to control more squares and in the same time does not allow the king run back to a2.

46... ♛d4 47. ♛e6 ♛h4+ 48. ♔g8 ♛f4 49. ♛d5 ♔a3 50. ♔h7!

Gelfand employs the right technique! Centralizes his queen and comes out with his king.

50... ♛h4+ 51. ♔g6 ♛g3+ 52. ♔f7 ♛f4+ 53. ♔e8 ♛b8+ 54. ♛d8

Better was 54. ♔e7 ♛c7+ 55. ♔f6 ♛f4+ 56. ♛f5 ♛d6+ 57. ♔g5 etc. With the ideas we have already seen.

54... ♛b5+ 55. ♛d7 ♛h5+

♛b8 was more stubborn.

56. ♖f8 ♗f3+ 57. ♗e7 ♗e4+ 58. ♗e6
♗b7+ 59. ♖f6 ♗f3+ 60. ♖g5!

Finally everything seems to work out.
The king is heading to the right di-
rection.

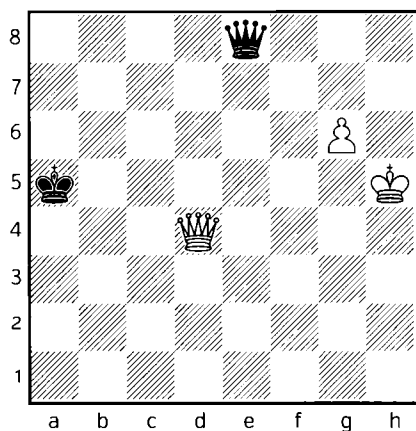
60... ♗g3+ 61. ♗g4 ♗e5+ 62. ♖h4!
♗f6+ 63. ♗g5 ♗d4+ 64. ♖h3

and Black resigned as he has no more
checks after ♗d7 ♗g4. Once again,
we cannot expect anybody to play
perfectly, but we should know the
general defensive and attacking ideas.

1-0

4

▷ M. BOTVINNIK
▶ N. MINEV
AMSTERDAM, 1954



The white queen is ideally placed in
the center. He needs to hide his king

now somewhere on the 4th or 5th rank
where the black king is.

80. ♖g5 ♗e7+ 81. ♖f5! ♗f8+ 82. ♖e4

No more check for Black, ♗e5 or ♗d5
trades queens. Otherwise the pawn
gets to g7.

82... ♗h6 83. ♗e5+ ♖a4 84. g7

The pawn has reached the 7th rank,
the queen is ideally placed in the
center just as the king which is al-
ready on the 4th rank, ready to meet
a check with a countercheck.

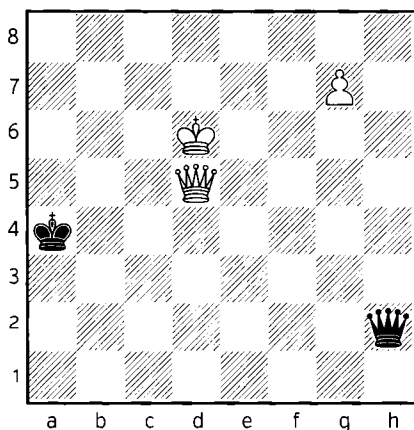
84... ♗h1+ 85. ♖d4 ♗d1+ 86. ♖c5
♗c1+ 87. ♖d6 ♗d2+

87... ♗h6+ 88. ♖d5!+- is very nice.
Black has no more checks because of
♗d4 or ♗e4!

88. ♖e6 ♗a2+

It is easy to feel, that these are the last
desperate checks. The central queen
is controlling the entire board.

89. ♗d5 ♗e2+ 90. ♖d6 ♗h2+



91. ♔c5!

Black resigned! A hidden shelter for the king in the middle of the board, but all the black checks are met by a countercheck!

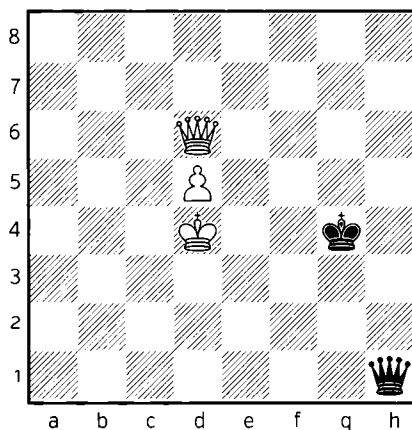
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7.3. F-E PAWNS

Central pawns are the most dangerous for weaker side, because they cut the board in two and after some checks the queen is unable to switch to the other flank.

1

▷ B. IVKOV
▷ R. HARTOCH
RAACH, 1969



The king soon hides in front of the pawn.

1... ♚a1+

1... ♚g1+ 2. ♔c4 ♚c1+ 3. ♔b5 ♚f1+
4. ♔c6 ♚a6+ 5. ♔d7 ♚b7+ 6. ♔e6
♚c8+ 7. ♚d7+-

2. ♔c5 ♔f3

After other checks, the king goes to the other flank and the queen soon cannot follow 2... ♚a5+ 3. ♔c6 ♚a6+ 4. ♔d7 ♚b7+ 5. ♔e6 ♚c8+ 6. ♚d7+-

3. ♚e6!

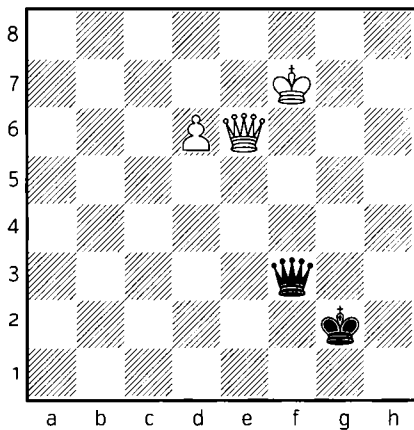
Perfect move! Centralizing the queen, preparing for the advance of the pawn and cutting the black king

from the pawn. White never needs to worry about perpetual check.

3... ♖a5+ 4. ♔c6 ♖a6+ 5. ♔c7 ♖a7+
6. ♔d8 ♖b8+ 7. ♔e7 ♖c7+ 8. ♔f6
♔g2

Black also tries his king from the counterchecks, but it nothing helps here. No more checks after 8... ♖d8+ 9. ♔g6+-

9. d6 ♖c3+ 10. ♔f7 ♖f3+



11. ♔g7!

We can see the same technique as with the g-pawn. White puts his king on the same line where the black king is. Now all the checks on the g-file is met by ♖g6.

11... ♖c3+ 12. ♔h7!

♖f6 was also good, but it is better to keep the queen in the center. Black has no more checks anyway.

12... ♖c6 13. ♔g4+ ♔f1 14. ♖f5+ ♔e1
15. d7

The end is near.

15... ♖d6

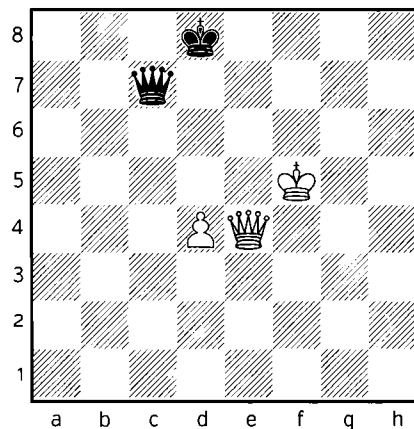
15... ♖h1+ 16. ♔g7 ♖g2+ 17. ♔f7+-;

15... ♖c7 16. ♔g8! ♖d8+ 17. ♔f7+- followed by ♖e6-e8.

16. ♖a5+ 1-o

2

▷ M. BOTVINNIK
▶ M. TAL
MOSCOW, 1960



If the king of the weaker side stands in front of the pawn the game should end in draw. Black must be careful to not miss the trade of the queens.

61. ♖h4+ ♔c8!

Only move to keep the queens on board. The king temporarily leaves it's ideal position, but it soon returns.

62. ♖h8+ ♔b7 63. ♕e5 ♖f7+ 64. ♔e4
♖g6+ 65. ♖f5

A huge gift could have been the self-mate after 65. ♔d5?? ♖c6#

65... ♖d6

A good square for the queen, now even an exchange on d6 would be just a draw.

66. ♖f7+

66. ♖d5+ ♔c7=

66... ♔c8 67. ♖f5+ ♔d8

White cannot make progress.

68. ♖a5+ ♔e8 69. d5 ♔e7 70. ♖a7+
♔d8 71. ♖a8+ ♔d7 72. ♔f5 ♔e7

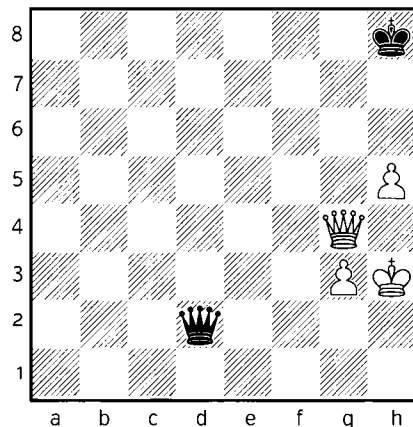
Draw agreed.

1/2

the defensive side, as it is going to be a 100 moves torture, but the objective evaluation in case of perfect defense is draw. The explanation is the following: White can proceed with his pawns for a while without problems, but when they get too far advanced, the king will be exposed and the defensive side will be able to defend himself with hundreds of checks.

1

▷ Z. RIBLI
▶ B. SPASSKY
MONTPELLIER, 1985



7.4. H+G PAWNS

This is quite an unbelievable story, but queen + h- and g-pawn cannot win against the queen if the king of the weaker side stands in front of the pawns. This is another case, what I would never wish to anyone to be on

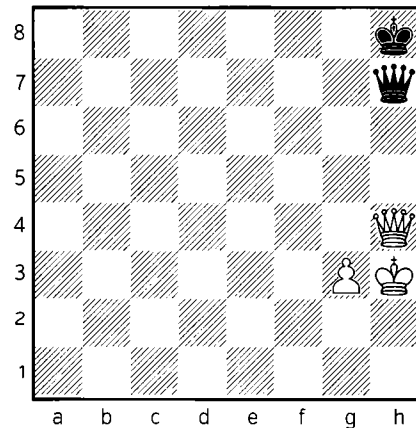
83.h6

Setting a big trap, but objectively it just weakens the pawn. Let's examine if White tries slowly with centralization 83. ♖e4 We should pay attention how the computer defends and holds the draw: 83... ♖d7+ He provokes the advance of the pawns to expose

the king on h3 84.g4 ♔d2 Black now waits how White wants to make progress. If it was his move, he could play ♔c1 or ♔d1 for example. 85.♔g3 ♔c1 86.♔h4 ♔d2! It is actually an only move, anything else is losing. 87.g5 As White it is better show patience and make progress very slowly. In general it is an advisable practical idea to let our opponents suffer, making him tired and allowing him to blunder something immediately. Now as an illustration, we check the most straightforward g5. 87...♔f2+ 88.♔g4 ♔g1+ 89.♔f5 ♔f2+ 90.♔f4 (The point again is 90.♔g6 ♔f7+!= Always the stalemate tricks!) 90...♔c2+ 91.♔e6 ♔c8+ Only this and ♔a2 checks are good. ♔b3, ♔e2 or ♔c6 were losing. These are again positions for the computers, for us it is impossible to understand all the details. 92.♔e7 ♔c5+ 93.♔f7 ♔d5+ 94.♔g6 ♔g8+ Only move again! 95.♔f5 ♔c8+ 96.♔e4 ♔c4+ 97.♔f3 The king has been sent back. Black can decide to keep on giving some checks or waiting with 97...♔c8 98.♔g3 ♔c3+ 99.♔g4 ♔c8+ 100.♔h4 and now the only move is 100...♔g8! Of course, it is quite impossible to find and we could continue like this for hundreds of moves. Despite the position is draw with perfect play, I would say in GM practice, from 10 games White would win 8 times and 2 draws.

83...♔b2!

The pawn could not be taken because of 83...♔xh6+ 84.♔h4 ♔h7



The direct trade of the queens would be drawn as Black takes the distant opposition, but White plays first 85.♔g4!+- and next move ♔xh7 followed by ♔h5 wins.

84.♔h4 ♔h2+ 85.♔g5

85.♔h3 ♔d2! Black holds.

85...♔xh6+!

This pretty stalemate trick saved Black from the suffering. This kind of stalemate ideas are another reason why White cannot win this endgame.

1/2

CHAPTER 8

COMPLEX POSITIONS – PRACTICAL GAMES

8.1. STALEMATE

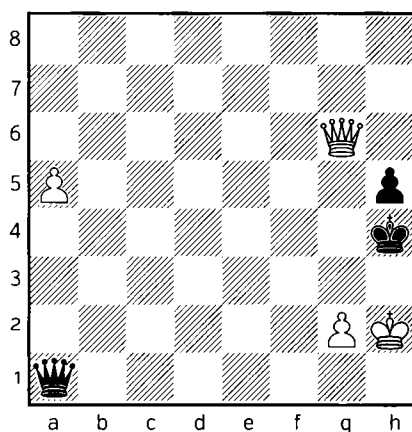
In queenendgames with limited number of pawns we must always be very careful with the different kind of stalemate tricks. In the previous chapter we have seen how Spassky survived against Ribli and now let us analyse some more examples to never forget about this important resource of the defensive side!

1

▷ B. SPASSKY

▶ P. KERES

BAKU, 1961

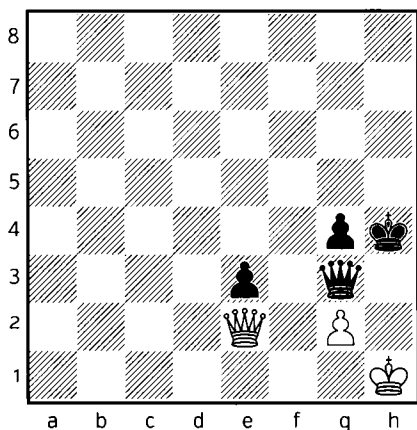


White was just about to mate with ♔g3 or g3 next move, but he forgot, that Black can only move with his queen and after sacrificing it, the game ends with stalemate

69... ♔h1+! 70. ♕xh1= 1/2

2

▷ ERMOLIN
▷ PETRIAEV
USSR, 1971



Thanks to a beautiful stalemate idea, White did not need to suffer anymore.

1. ♖f2!!

Amazing indeed!

1... ♜xf2

1...exf2= Stalemate.

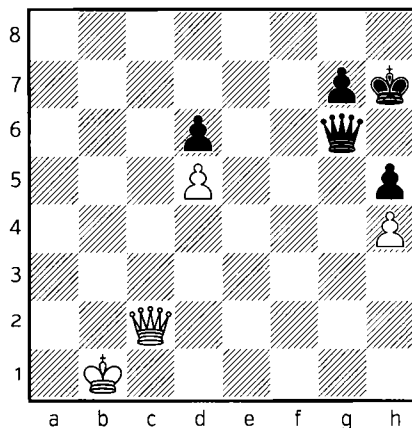
2.g3+!=

and whatever Black does, it is a stalemate.

1/2

3

PRACTICAL POSITION



Black has just played ♜g6 and was waiting for the resignation as the pawn endgame is over. However the shock was just about to come...

1. ♔a1!! ♜xc2=

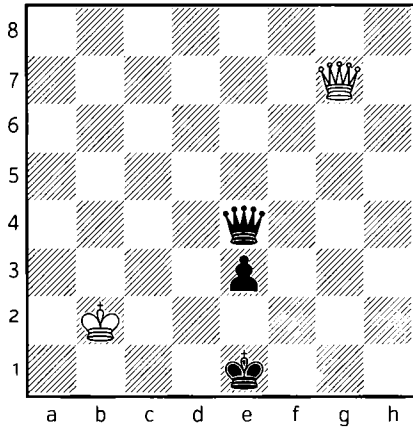
Stalemate! 1... ♔h6 does not help
2. ♜d2+ ♔h7 3. ♜c2!= Black cannot make progress.

8.2. MATING IDEAS

We should not forget that the queen is the strongest piece and sometimes with just a little help it can deliver unexpected mates. We should never lose our concentration, otherwise we might have some really painful moments and sleepless nights like it happens in the following examples.

1

▷ A. BATUEV
 ▶ V. SIMAGIN
 RIGA, 1954



Black has an e-pawn and a centralized queen. Everything is given to win the game, but the game is over only after the resignation of the opponent.

1...e2??

Terrible blunder... The easiest way to win was 1...♖b4+ 2.♔c2 ♕c4+ 3.♔b2 ♔d2--+ White has no hopes for perpetual. For example 4.♕g2+ e2 5.♖g5+ ♔d1 6.♖d8+ ♔e1--+ Black soon wins.

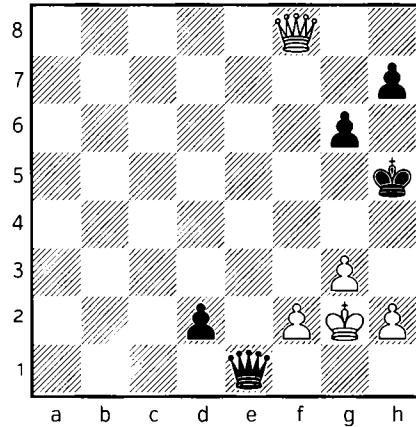
2. ♖g1+ ♔d2 3. ♖c1+ ♔d3 4. ♖c3#

What a shock!

1-0

2

▷ KARTANAITE
 ▶ KUTAVITSENE
 VILNIUS, 1983



Black was happy, that he soon promotes a queen, but he forgot about his king.

1. ♖f4! White creates a mate net.

1...g5

1...♖e7 also leads to mate after 2.g4+ ♔h4 3.h3!+- and ♖h6 or g5-♔h5 ♖g4 mate is coming next.

2. ♖f7+ ♔h6 3. ♖f6+ ♔h5 4.g4+! ♔h4

Or 4...♔xg4 5. ♖f3+ ♔h4 6. ♖h3#

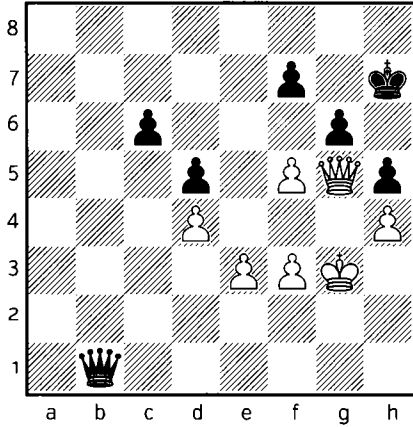
5. ♖f3!

Black cannot avoid getting mated.

1-0

3

▷ A. BELIAVSKY
 ▶ L. JOHANNESSEN
 LINARES LINARES, 2002

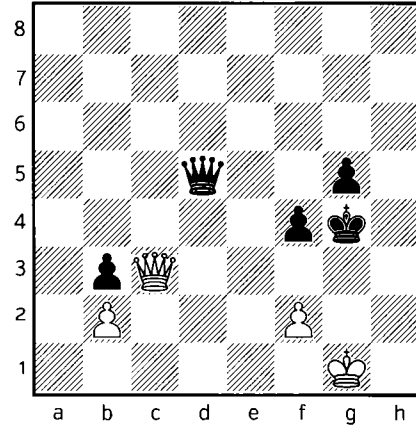


Blunders happen sometimes to the best players as well.

69. ♔f4?? ♚b8# 0-1

4

▷ R. NICEVSKI
 ▶ VAGANIAN
 SKOPJE SKOPJE, 1976



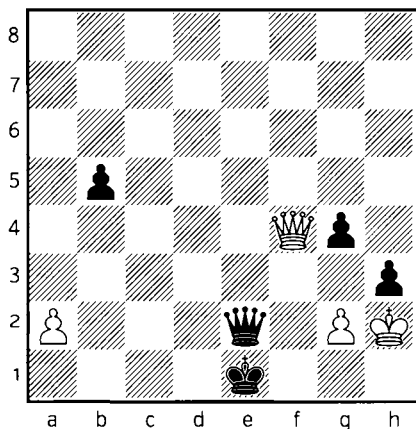
50. ♔h2

looked like random move for the Armenian legend and he played the completely careless

50... ♚d1?? 51. ♚h3# 1-0

5

▷ B. AVRUKH
 ▶ G. TIMOSCENKO
 LEON LEON, 2001



95. ♔c1+

The game should have finished with perpetual check after ♔d1, but a chess blindness brought an unexpected victory for White.

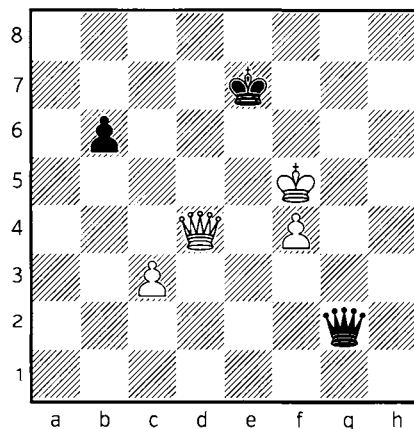
95... ♕f2??

95... ♖d1 96. ♖e3+=

96. ♖g1# 1-0

6

▷ J. BENJAMIN
 ▶ E. GUFELD
 USA HAWAII, 1998



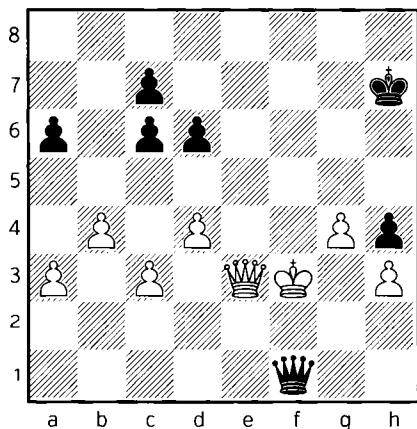
79... ♖h3+ 80. ♔e5?? ♖e6#

Another nightmare, this time for the US grandmaster.

0-1

7

▷ O. REEH
▷ W. BECKEMEIER
GERMANY, 1999



White should have settled for draw with

44. ♔e4??

44. ♖f2 ♜xh3+=

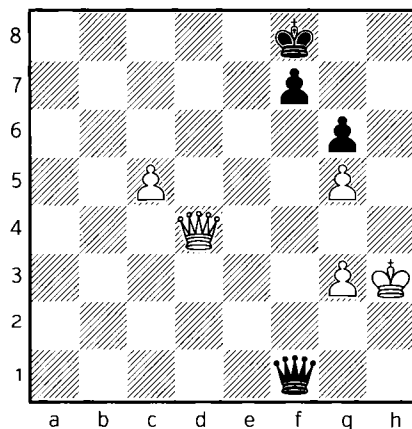
44...d5+ 45. ♔e5 ♔g6

And suddenly White cannot avoid getting mated! 45... ♔g6 46. ♔e6 (46. g5 ♜f5#) 46... ♜f7+ 47. ♔e5 ♜f6#

0-1

8

▷ G. BORISENKO
▷ V. SIMAGIN
MOSCOW, 1955



Black had excellent chances to save the game, but after a blunder he even wins the game...

59. ♔g4??

59. ♔h4 ♜e2! White cannot make progress.;

Or after 59. ♔h2 ♜e2+ 60. ♔g1 ♜e1+ 61. ♔g2 ♜e2+ 62. ♜f2 ♜c4!= White cannot make progress, his king is too much exposed.

59...f5+!

Another shock! White gets mated. 59... f5+ 60. gxf6 (60. ♔h4 ♜h1#) 60... ♜f5+ 61. ♔h4 ♜h5#

0-1

8.3. SIMPLIFICATION INTO PAWN END-GAMES

Transposing into a pawnendgame is a very important resource for both sides, but of course it must be calculated correctly. In the following three examples we will see some really unfortunate decisions based on a miscalculation.

Black correctly sees that after the trade of the queens he stands in the square of the a-pawn. However he forgot about a detail... 65...♔g7 66.♚c7+ ♔g6 67.♚c6+ ♔h5 68.♚h1+! ♔g6 69.♚c6+=

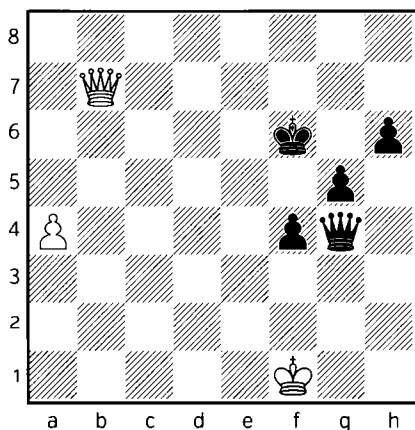
66.a5!+-

White wins a decisive tempo and now the pawn is promoting.

1-0

1

▷ V. PAPIN
▶ R. NECHEPURENKO
ST PETERSBURG, 2008



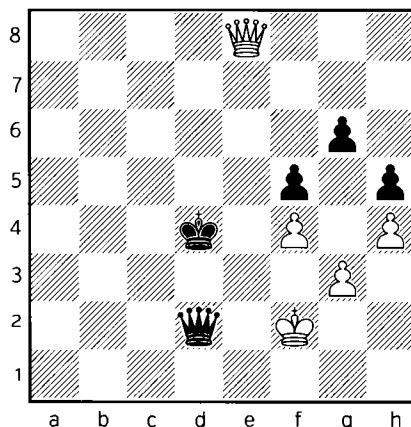
65.♚b6+

White actually holds the draw by perpetual check, but a blunder even helps him to victory.

65...♚e6??

2

▷ A. BELIAVSKY
▶ E. SVESHNIKOV
NOVI SAD, 1979



The game should end in draw, but Beliaevsky miscalculates the outcome after trading queens.

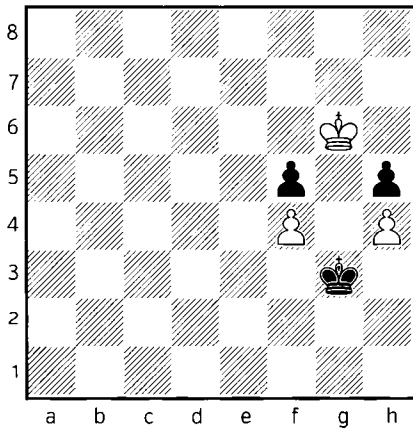
68.♚e2?? ♔c3!

Suddenly Black wins the fight for the opposition and he wins the endgame. He only checked 68... ♖xe2+ 69. ♘xe2 which leads to draw indeed 69... ♘e4 70. ♘f2 ♘d3 71. ♘f3 ♘d2 72. ♘f2 Black cannot make progress.

69. ♘f1 ♖xe2+ 70. ♘xe2 ♘c2! 71. ♘e3

71. ♘e1 ♘d3 72. ♘f2 ♘d2 73. ♘f3 ♘e1! Black wins by using the going behind the pawn technique. 74. ♘e3 ♘f1 75. ♘f3 ♘g1-+ and the g3 falls soon.

71... ♘d1! 72. ♘d4 ♘e2 73. ♘e5 ♘f3 74. ♘f6 ♘xg3 75. ♘xg6



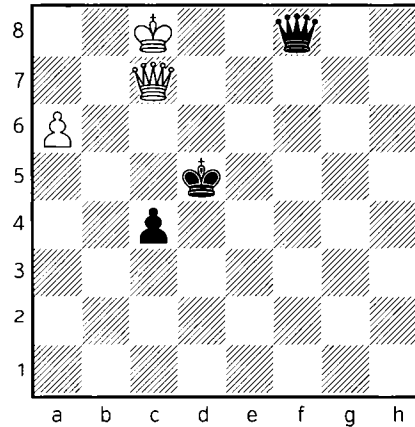
75... ♘g4!-+

Typical zugzwang idea! Black delays the capture of the pawns and decides according to which direction White is moving with his king.

0-1

3

▷ P. JIRASEK
▷ S. KAPHE
PARDUBICE, 2007



78. ♖d8+??

A horrible simplification. White only sees, that his pawn is more advanced and it is promoting with check, but he forgets about that the black king is in the square of the pawn... The game should have finished in a draw after 78. ♘b7 ♖b4+ 79. ♘a8 c3 80. ♖b7+ ♖xb7+ 81. axb7 c2 82. b8 ♖ c1 ♖ =

78... ♖xd8+ 79. ♘xd8 ♘c6!-+

Black stops the pawn first before promoting his own. White resigned in view of ♘c8 ♘b6!

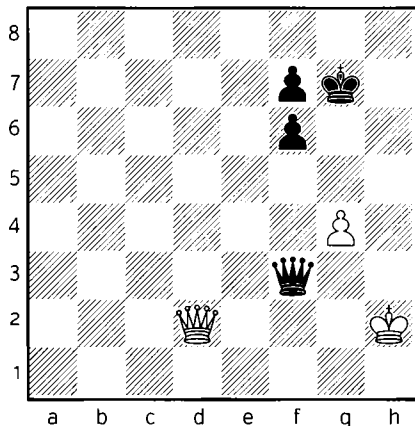
0-1

8.4. ONE FLANK QUEEN ENDGAMES

We discuss a common topic with big practical importance in this chapter, when one side has an extra pawn, but all pawns are on the same flank and the kings are standing in front of each other.

1

▷ Z. HRACEK
 ▷ YU YANGYI
 EUROPEAN CLUB CUP, 2015



This endgame should obviously be a draw as the white king is ideally placed, but Black can still set many traps. Black tries all his practical chances and in the end he succeeds...

63. ♖d4 ♔g6

Black should try to win the the g4 pawn, but it is going to be difficult, because White can always counter-attack the one on f7 or start to give many checks.

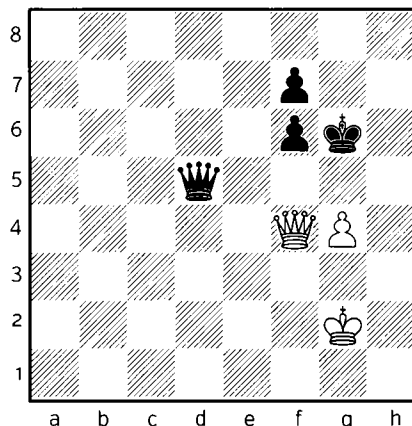
64. ♚c4

White prevents ♔g5 by keeping an eye on f7.

64... ♚e3 65. ♔g2 ♚e6

The f7 pawn is protected and Black is ready to play ♔g5, but now the queen is gone from the central squares, therefore White can also prevent his opponent's plan.

66. ♚f4 ♚d5+



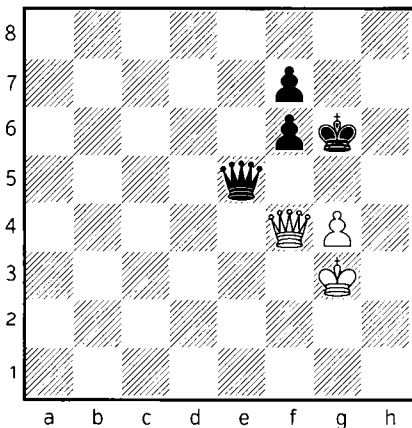
67. ♔g3!

White correctly realizes that in this situation he can even allow the trade of the queens, because the pawn endgame will still be a draw...

67... ♖g5

On 67... ♖e5 68. ♔f3! ♖xf4+ 69. ♔xf4
Black must allow ♔f5 followed by g5
next move, with a theoretical draw.
69... ♔h6 70. ♔f5 ♔g7 71. g5 fxc5
72. ♔xg5=

68. ♔f3 ♖e5 69. ♔g3?



A terrible blunder, which remains
without punishment...

If White switches back to his previous
strategy and plays 69. ♖c4 he holds
the draw fairly easily.

69... ♖d5?

Missing the chance... Black could
have entered the same pawn endgame
we have seen before, but with White
to move, which would have changed
the result... 69... ♔g7! 69... ♔h7 also
does the job, as the point is that after
trading the queens on f4, Black must
go back to g6 to avoid ♔f5. 70. ♔f3
♖xf4+! 71. ♔xf4 ♔g6! and now

White is in zugzwang. ♔g5 is coming
next move... 72. ♔f3 ♔g5 73. ♔g3 f5!
74. gxf5 ♔xf5 75. ♔f3 f6!-+ Black wins
the opposition and the game is over!

70. ♖e3?

Both players miss the same motif
once again... White should have just
waited, for instance with 70. ♔h3

70... ♖d6+?

70... ♖e5+ wins again.

71. ♖f4 ♖d5

71... ♖e5 is already a draw as we know,
because after 72. ♔f3 ♖xf4+ 73. ♔xf4
we reach the mutual zugzwang posi-
tion, but with Black to move.

72. ♖e3? ♖g5?

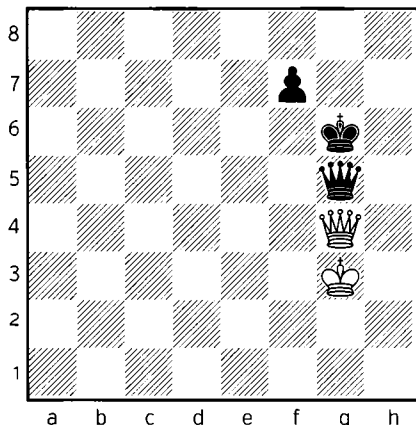
Once again a counterblunder.

73. ♖f4 f5 74. ♖d6+?

74. ♖d4? is also wrong, because of
74... ♔h7!! and Black takes ♖xg4 next
move, which cannot be taken because
Black gets the opposition at the end
with ♔g6 ♔f4 ♔f6!(74... ♖xg4+?
75. ♖xg4+ fxc4 76. ♔xg4 ♔f6 77. ♔f4
is a draw.)

The right move was 74. ♔f3! fxc4+
75. ♖xg4= and White is the one who
holds the opposition. 75... ♖xg4+
76. ♔xg4=;

Another interesting trap is 74. ♖f3 fxg4 75. ♗xg4?



It seems like White holds the opposition again, but after 75... ♖f6!-+ White cannot avoid the trade of the queens, whereafter it is already Black who will oppose his king to the other...

74... ♖h7!

Black wins the g4 pawn, as the pawn endgame is losing now.

75. ♗d7

75. ♗d4 ♗xg4+ 76. ♗xg4 fxg4 77. ♖xg4 ♖g6 78. ♖f4 ♖f6!-+

75... ♗xg4+ 76. ♖f2

The arising position is already won for Black according to the tablebases. The official evaluation is Black mates in 57 moves. :) Of course, in such endgames humans cannot find the correct moves, they can just play ac-

ording to their feelings and calculate the lines themselves, but there are so many threats that the endgame is basically hopeless from White's point of view. The main problem is that Black will advance his f5 pawn and he will always threaten to trade queens and transfer into a winning pawn endgame.

76... ♗f4+ 77. ♖g2 ♖g6 78. ♗c8 ♗e4+ 79. ♖f2 f4

The centralized queen on e4 is very strong as it covers the full board, and White has no chance to give a perpetual check because of it.

80. ♗g8+ ♖f6 81. ♗d8+

In case of 81. ♗h8+ ♖g5 82. ♗g7+ ♗g6! 83. ♗e5+ ♖g4 84. ♗e2+ ♖h3-+ Black is ready to play ♗g3 next.

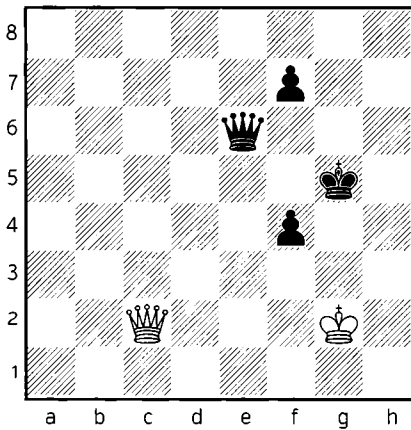
81... ♖f5 82. ♗c8+

82. ♗d7+ is also met by 82... ♗e6 83. ♗d3+ ♖g5 84. ♗d8+ f6-+ Black can put his pawn on f6, because he will still be ready to trade queens as his king is advanced enough to take the opposition.

82... ♗e6 83. ♗c2+ ♖g5

In this hopeless position, White blunders a hidden trap...

84. ♖g2



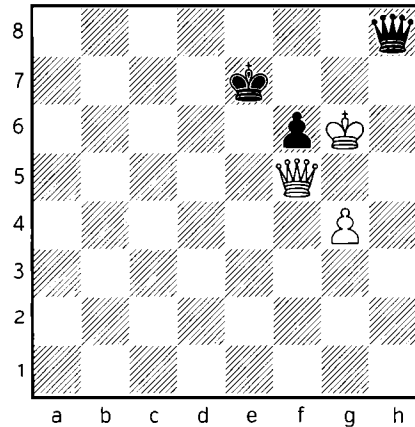
84...f3+!!

A very nice check! Black sacrifices his pawn, but he forces the trade of the queens regardless of where the white king goes...White resigned in view of 84...f3+ 85.♔xf3 (85.♔f2 ♚e2+! 86.♚xe2 fxe2 87.♔xe2 ♔f4-+; 85.♔g3 ♚g4+ 86.♔h2 ♚g2+ 87.♚xg2+ fxg2 88.♔xg2 ♔g4-+; 85.♔f1 ♚e2+! 86.♚xe2 fxe2+ 87.♔xe2 ♔f4-+) 85... ♚f5+ 86.♚xf5+ ♔xf5-+

0-1

2

▷ A. BELIAVSKY
▶ R. BYRNE
MOSCOW, 1975



White pieces are more active, but it is not easy to win f6 pawn.

77.♚e4+!

Sending away the black king from the pawn.

77...♔d6

77...♔f8? 78.♚a8+-

78.♔f7! ♚h4

Logical human response. Black tries to counterattack the g4 pawn. However it is decisive mistake. 78...♔c5!! was the only move to draw according to the computers. The point is, Black already gives up his f-pawn and he is heading to the optimal square with

his king, which we already know is on a2! 79. ♖e7+ ♔c4 80. ♗xf6 ♖h7+ 81. ♗g7 ♗e4 82.g5 ♔b3 83.g6 ♔a2 This is the right strategy for the defensive side!

79. ♗f5

The right technique! White could have sent back the king to the 7th rank which is important, because it is more far from the a2 square. 79. ♗d4+ ♔c7 80. ♗f4+ ♔b7 81. ♗f5+-

79... ♔c7 80. ♗c5+ ♔b7 81. ♗h5!

This forces Black to leave the g-pawn as White promotes the pawn faster in case of exchange.

81... ♗f2 82. ♗d5+ ♔c7 83. ♗c4+ ♔b7

Black cannot run to a2 with 83... ♔b6 because after 84. ♗e6+ he must turn back due to the winning simplification with ♗f5.

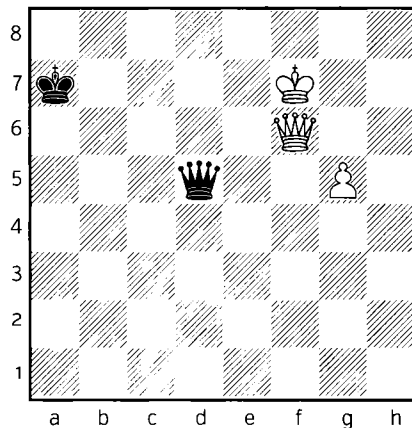
84. ♗e4+ ♔b8 85. ♗e8+ ♔a7 86. ♗e7+!

Perfect technique by Beliavsky. The f6 pawn falls and because of the bad placement of the bad king, the White is winning by perfect play, but of course it still requires technique. However to defend such positions is much harder, therefore if we know the right technique, the win should be in our hands.

86... ♔a8 87. ♗d8+

87. ♗xf6 it was more logical to take at once.

87... ♔a7 88. ♗xf6 ♗g2 89.g5 ♗d5+



90. ♔g7

The kings are ideally placed from White's point of view, as they are on the same rank and Black does not have the chance to give more checks. The queen is also doing perfectly on f6, because it protects the king from checks and cuts the black king to run to the other corner. At this circumstances, Black is basically hopeless.

90... ♗h1 91.g6 ♗h2 92. ♗d4+

92. ♔g8+- was also good, to advance the pawn to g7 first.

92... ♔a6 93. ♔f6

A perfect square for the queen on d4. It controls the entire board from the center.

93... ♖h6 94. ♗e5!

White wants to play ♔f7 and g7, but first he prevents ♗h5.

94... ♔a7

94... ♗f8+ 95. ♔g5+- No more checks for Black, because of the bad placement of his king.

95. ♔f7 ♗h3 96. g7 ♗f3+ 97. ♔e7

The fastest win was 97. ♗f6 ♗d5+ 98. ♗e6 ♗h5+ 99. ♔f8+- but against the a7 king, White cannot really go wrong.

97... ♗a3+ 98. ♔d8 ♗d3+ 99. ♔e8 ♗c4

99... ♗g6+ 100. ♔f8+-

100. ♔f8 ♗f1+

100... ♗c8+ 101. ♗e8+-

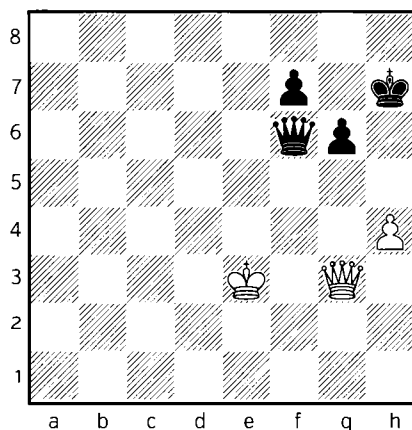
101. ♔e7 ♗c4 102. ♗e3+ ♔b7 103. ♗f3+ ♔b6 104. ♗f6+!

Black resigned in view of 104. ♗f6+ ♔b7 (104... ♔b5 105. ♗g5+-) 105. ♗f7+- and countercheck with the king next move followed by promotion.

1-0

3

▷ B. LARSEN
▷ P. KERES
SAN ANTONIO, 1972



Black is winning here because of two reasons: One of the extra pawns is a passed pawn and the white king is cut along the f-file. The h4 pawn cannot be protected after ♔h6-h5.

68. ♗g5!

A clever attempt by White to transpose into drawish pawnendgame, but Black is not forced to trade.

68... ♗f1 69. ♗g4 ♗e1+!

Sending the king away from the kingside with another line.

70. ♔d3

70. ♔f4? ♗b4+-+;

70. ♔f3? ♖d1+-+

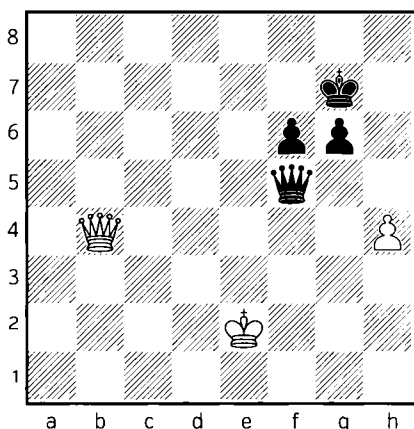
70... ♖e6 71. ♖f4 ♔g7 72. ♖d4+ f6

Black is not in hurry. He slowly makes progress with f6, ♖e5, ♔h6.

73. ♖b4

73. ♖f4 ♖e5 74. ♖g4 ♔h6--+

73... ♖f5+ 74. ♔e2



74... ♔h6! 75. ♔e1

If 75. ♖f8+ ♔h5 76. ♖h8+ ♔g4--+ the h-pawn falls soon.

75... ♔h5 76. ♖c4 ♖g4 77. ♖c5+ ♔xh4--+

We know, that Queen + h- and g-pawn against a queen is a draw if the king of the defensive side is in front of the pawn. Against any other pawns, there is no chance to hold, because the king has much more place to hide from the checks.

78. ♖e7 ♖f5 79. ♖b4+ ♔h5

79... ♔g3 was faster, but Black does not need to hurry.

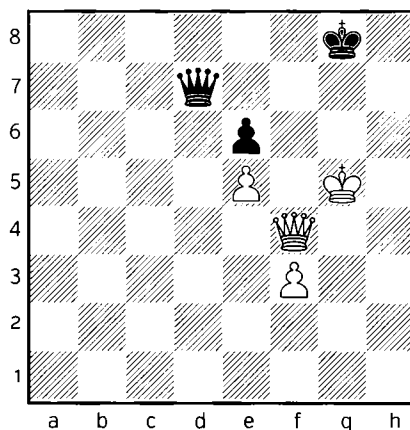
80. ♖c4 g5

The rest is easy, but let's the technique of the great Paul Keres!

81. ♖f7+ ♔h4 82. ♖f8 ♔g3 83. ♖a3+ ♖f3 84. ♖d6+ ♔g2 85. ♖d2+ ♔h3 86. ♖d7+ f5 87. ♖g7 g4 88. ♖h8+ ♔g3 89. ♖e5+ f4 90. ♖b8 ♖e3+ 91. ♔d1 ♔g2 0-1

4

▷ L. POLUGAEVSKY
 ▶ F. HELLERS
 HANINGE, 1990

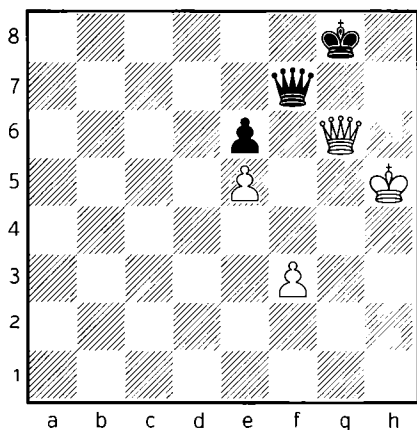


White is winning here. He can slowly make progress by using the fact, that pawn endgames are almost always winning for him, therefore he does

not need to worry that much about checks. The task is to squeeze out the opponent's king to get access to the e6 pawn with our own king.

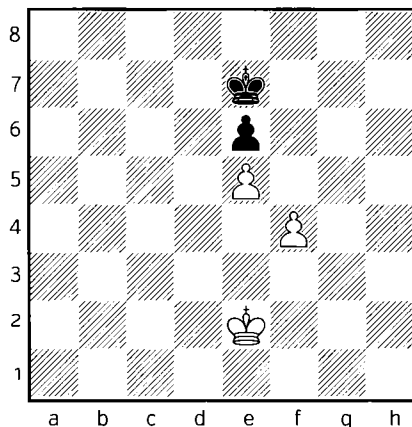
93. ♖h5 ♖g7

A very deep trap could have been layed by playing 93... ♖h7+! The most tempting reaction 94. ♖h6? suddenly falls into the trick (94. ♖g4! ♖d7 95. ♖h6+- is winning, it will be very similar to the game.) 94... ♖f7+! 95. ♖g6+



95... ♖h8!! As we know, in queenendgames we should never forget about stalemate as a defensive resource. 96.f4 ♖h7+!! Another only move! White has spared his last reserved tempi with f3-f4 and suddenly the pawn endgame is drawn because of the opposition 97. ♖xh7+ (97. ♖h6 fighting for the opposition, but Black can play 97... ♖g8!; 97. ♖g5 draws immediately after 97... ♖h4+! 98. ♖xh4=) 97... ♖xh7 98. ♖g4 ♖g6 99. ♖g3 ♖g7! Keeping the distant opposition 100.

♖f3 ♖f7 101. ♖e3 (101. ♖g4 ♖g6=) 101... ♖e7 102. ♖e2



waiting for which direction to go, but Black can also wait with keeping the opposition 102... ♖e8! 103. ♖d3 ♖d7 104. ♖c4 ♖c6=

94. ♖g5+ ♖f8

After 94... ♖h7 95. ♖g6+ ♖h8 96. ♖h6! There is no stalemate trick this time! 96... ♖d2+ 97. ♖g5 ♖h2+ (97... ♖d7 98. ♖f6+ ♖g8 99. ♖g6+ ♖h8 100.f4! ♖f7 101. ♖f6+!+-) 98. ♖h5+-

95. ♖h6!

White slowly proceeds slowly but surely.

95... ♖d5 96. ♖f6+ ♖e8 97. ♖g7!+-

White needs to win one more square to get to f7 with his king.

97... ♖d7+ 98. ♖g8 ♖d5 99.f4 ♖g2+ 100. ♖g7 ♖h3

100... ♖e4 101. ♗f7+ ♔d8 102. ♗xe6
 ♗xf4 103. ♗f6++-;

100... ♗d5 101. ♗f7+ ♔d8 102. ♔g7+-
 and ♔f6 coming next.

101. ♗g6+ ♔d8

101... ♔e7 102. ♗h7+-

102. ♔f7 ♔d7 103. f5 1-0

1.f6!

Playing for the mate with 1. ♔g6
 brings nothing 1... ♗xg4+ 2. ♔f7 ♔h7!
 and Black holds!

1... ♔h7!

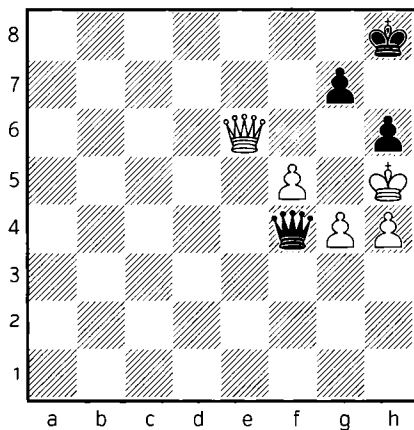
A last trick! 1... gxf6 2. ♔g6+-

2.fxg7?

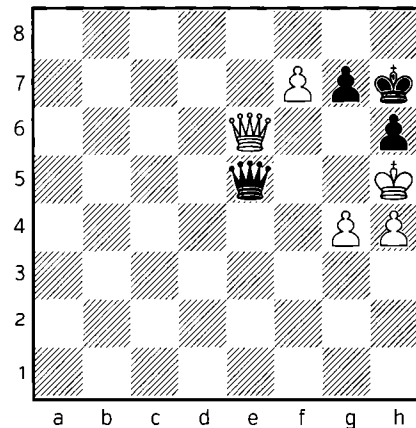
White overlooks a queen sacrifice
 that forces stalemate. White actually
 had two different ways to win. One
 for human and the other is for stud-
 ies... The computer-like win was 2.f7!
 White is threatening with ♗f5 check.
 It looks like a blunder because of 2...
 ♗e5+!

5

▷ L. SHCHERBAKOV
 ▶ V. ARLAZAROV
 USSR, 1972



A study-like endgame was reached
 in the following game. Everything is
 protected for the moment and Black
 has no checks, but to make progress,
 White has to break his safe structure
 and give some chance for counter-
 play.



But the counterblow is coming
 with 3.g5!! (3. ♗xe5?? g6#) 3... ♗xe6
 4.f8 ♗+!+- Underpromotion!;

The human win was 2. ♗f5+! sim-
 plification into winning pawn end-
 game! 2... ♗xf5+ 3.gxf5 gxf6 4. ♔g4

♔g7 5.♕f4 ♕f7 6.♕e4 ♕e7 7.♕d5
♕d7 8.h5!+- setting Black into deci-
sive zugzwang. White is winning by
outflanking.

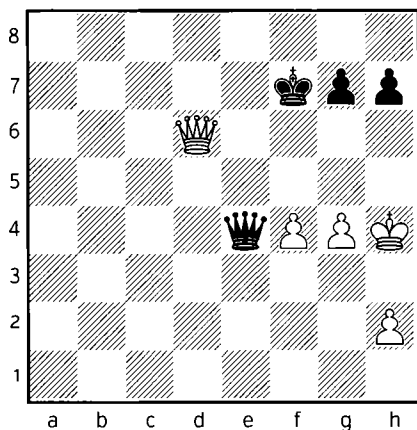
2... ♖f7+!

and draw agreed! As always, we must
draw your attention to never forget
about stalemate!

1/2

6

▷ A. KHARITONOV
▷ V. SAVON
MOSCOW, 1995



Let's examine a practical game for the
3 vs 2 on one flank, when the circum-
stances are not that ideal like they
were in the previous example.

1... ♖e1+ 2. ♔g5

Of course not 2. ♔h5?? which runs
into selfmate after 2...g6+ 3. ♔g5 h6+!
4. ♔xh6 ♖h4#

2... ♖a5+

Black should not weaken his g6
square with 2...h6+? 3. ♔h5± could
be easily the same as the previous
example.

3.f5 ♖c3

Black correctly just stays and waits
for White to make progress.

4. ♖e6+ ♔f8 5.h4

There is no danger of getting mated,
but the problem will be to make pro-
gress somehow.

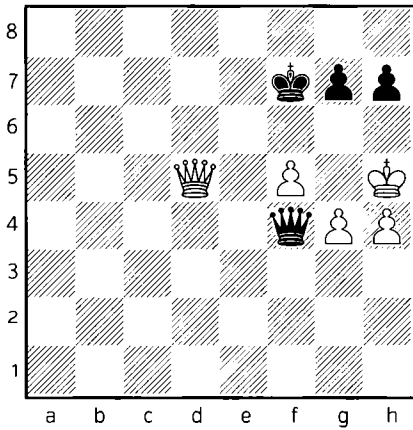
5... ♖d2+ 6. ♔h5 ♖f4

Black should have played 6... ♖d8!=
after which White does not have re-
alistic winning chances.

7. ♖c8+ ♔f7

7... ♔e7!= was more precise, now the
queen cannot get to d5 with check as
it happens in the game.

8. ♖d7+ ♔f8 9. ♖d8+ ♔f7 10. ♖d5+



White centralizes his queen and his ready to make progress with g5 after covering the f3 and f5 squares. The draw was still achievable for Black, but it could be find only with luck. Who could believe, that the position with the king on e7 and pawn on g5 is a mutual zugzwang?! If it is Black's turn he is losing and with White to move it is a draw.

10...♔e7

10...♔f8! 11.g5 ♔e7! and White does not have a useful plan after which the f5 and f3 could remain protected.

11.g5+-

Black is in zugzwang now, he must give up the nice outpost of his queen.

11...♚e3

11...♔f8 loses now to 12.♚d8+ ♔f7 13.g6+ hxg6+ 14.fxg6+ ♔e6 15.♚g8+-

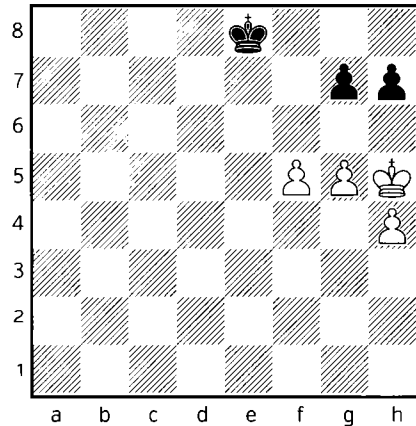
12.♚b7+ ♔f8 13.♚c8+ ♔e7 14.♚c7+ ♔f8

14...♔e8 15.♚xg7+- getting the h6 square for the king.

15.♚d8+ ♚e8+

Or 15...♔f7 16.g6+ hxg6+ 17.fxg6+ ♔e6 18.♚e8+-

16.♚xe8+ ♔xe8



The pawnendgame is winning after

17.♔g4! ♔f7 18.♔f4 g6

18...♔f8 19.♔e5 ♔e7 20.h5 ♔f7 21.♔d6 h6 22.gxh6 gxh6 23.♔e5+- As we learned, against the h6 pawn White is winning with the triangulation after pushing f6.

19.f6 ♔e6 20.♔e4 ♔d6 21.♔d4 ♔e6 22.♔c5 h6

22...♔f7 23.♔d6 ♔f8 24.♔e6 ♔e8 25.f7+ ♔f8 26.♔f6! Setting Black into

zugzwang by stalemating him 26...h5
27.gxh6 g5 28.h7+-

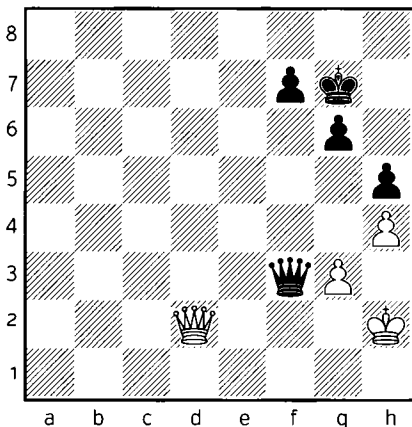
23. ♖c6 ♜f7 24. ♖d6

Black resigned in view of the technique, that we have also studied before 24. ♖d6 hxg5 25. hxg5 ♜f8 26. f7! ♜xf7 27. ♖d7 ♜f8 28. ♖e6+- followed by capturing the g-pawn on the 6th rank which is winning.

1-0

7

▷ V. CIOCALTEA
▶ W. UNZICKER
ALEKHINE MEMORIAL
MOSCOW, 1956



The following endgame might easily arise in a practical game. Both sides have a healthy pawnstructure and the question is how big chances does Black have to realize his mate-

rial advantage? The main problem is, any kind of advance with the pawns lead to simplifications which brings the defensive side closer to the draw. The best, that Black could try is to break in with his king to the opponent's camp, but it demands a lot of preparation and it will meet with lots of checks on its long way.

57. ♖d4+ ♜f6 58. ♖d2 ♜e5 59. ♖g2

White just keeps his stable position.

59... ♖f6 60. ♖d8+ ♖f5 61. ♖d7+ ♜e6 62. ♜b5+ ♜e5 63. ♖d7+ ♜e6 64. ♜b5+ ♖f6 65. ♜g5+ ♖g7 66. ♖d2

The first attack was successfully pushed back. Black now gives another try.

66... ♜c4 67. ♖h2

It is good to give disturbing checks if it is possible. 67. ♜b2+

67... ♖f6 68. ♖d8+ ♖e6 69. ♜e8+ ♖f5 70. ♖d7+ ♖e4 71. ♜e7+ ♖d3 72. ♜a3+

72. ♖d6+ ♖c2 73. ♜e5! was better to defend with the centralized queen. Much easier to give another dozens of moves after Black's next move.

72... ♖c2 73. ♜e7 ♖d1 74. ♖d8+ ♖e2 75. ♜e7+ ♜e6 76. ♜b7

The task is done and the black king takes part in the fight, but of course,

this is still very far from success. The next step could be to explode the pawn structure in some construction like ♖e3-♔f2 and f5-f4, but it is quite difficult to execute as many checks are coming.

76...♔f2 77.♞g2+ ♔e1 78.♞g1+ ♔e2 79.♞g2+ ♔d3 80.♞f3+ ♔d2 81.♞f4+

The queen must guard the f7 pawn.

81...♔e2 82.♞c7

Perhaps it was more easy to defend with the king on the g-file, or at least to send away the black king with some checks. 82.♔g2!? ♞d5+ 83.♔g1=

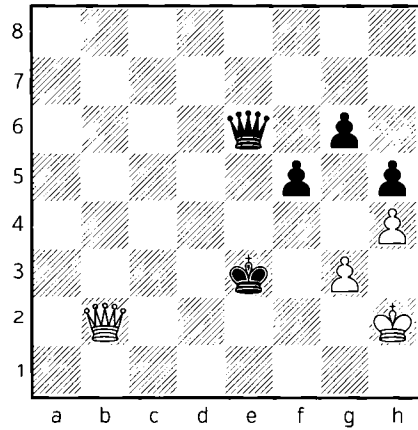
82...f5 83.♞c2+ ♔f3

White already needs to be precise.

84.♞g2+!

Only move, otherwise the queen enters.

84...♔e3 85.♞b2



White should have continued giving checks. 85.♞g1+ ♔d2 86.♞d4+ ♔e2 87.♞b2+ ♔f1 88.♞g2+ ♔e1 89.♞g1+ ♔d2 90.♞d4+

85...♞c4!

Black is improving his position with each move. He made significant progress since the initial position and I would say his chances for the win are already better than White's one to survive in a practical game. The game is still drawn, but there are more and more things White has to take care about. Much easier to make a mistake.

86.♞a3+

86.♞e5+? was losing to 86...♔f3 and ♞e2 next;

86.♞b1 was the other move, but it is already very difficult to find.

86...♞d3 87.♞c5+?

The only move was 87. ♔a1! which still holds, but of course it was more tempting to give a check.

87... ♖f3

There is no adequate defense anymore.

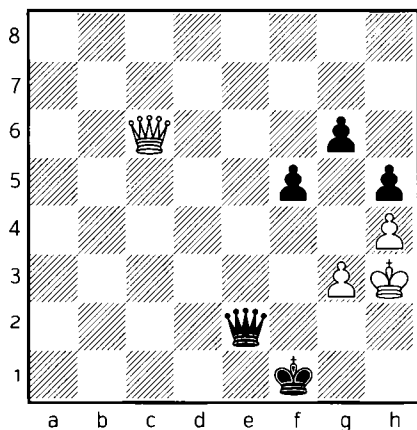
88. ♖c6+ ♖e4 89. ♖c3+ ♔f2
90. ♖c5+

90. ♖d2+ ♔f1 91. ♖d1+ ♖e1!-+ Black uses the standard technique for saving himself from the checks by preparing a countercheck.

90... ♖e3-+ 91. ♖c2+ ♖e2 92. ♖c6

Covering the g2 square to avoid getting mated, but the game is already gone...

92... ♔f1+ 93. ♔h3

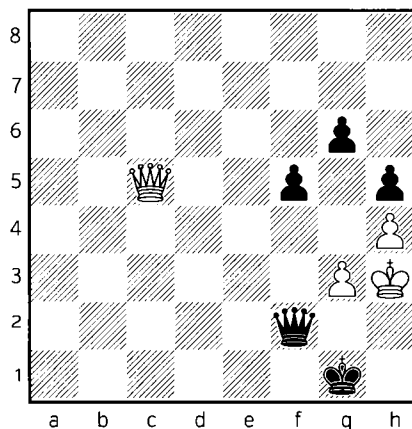


93. ♔h1 ♖e4+-+

93... ♔g1!

Great technique by Black! White cannot give check on the first rank, which means the end of the game.

94. ♖c5+ ♖f2



95. ♖e3!?

A great try, but now, even stalemate tricks do not help. 95. ♖c1+ ♖f1+-+

95... f4!

and Black resigned as the pawn endgame is lost.

0-1

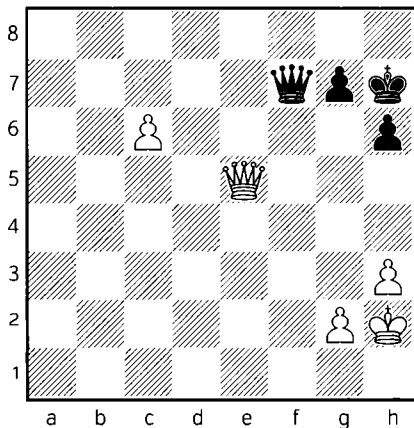
8.5. PASSED PAWN

Passed pawns are the most important in queen endgames. One should always aim for creating one. A well supported passed pawn usually worth even some material. For example, we can give up all the other pawns if with

the help of the king and queen we manage promote our passed pawn. The next chapter shows some typical examples how to use a passed pawn in queen endgames.

1

**AVERBAKH
1962**



We start with a simple example, where the queen alone can support the passed pawn without the help of the king. Black has no chance to give perpetual, the king is perfectly protected by the centralized queen.

1.c7 ♕d7 2. ♕e4+ g6 3. ♕c2!

Covering the backrank to avoid getting more checks after ♕d6-♔h1.

3... ♕c8 4. ♕c5!

It is time to go to d8 or b8 with the queen.

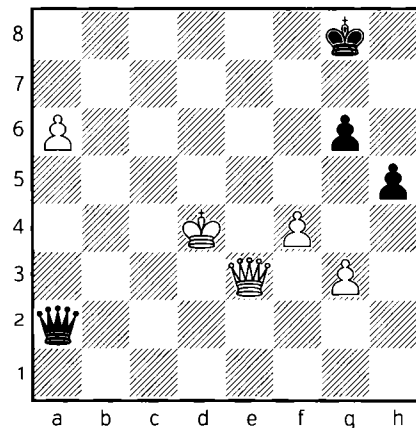
4...h5 5. ♕e7+ ♔h6 6.h4

Not giving any chance for a perpetual. Now after ♕d8, ♕h8 is also threatening. Typical mistake would be the hasty 6. ♕d8 ♕e6 of course, all the moves are winning still, just not 7.c8 ♕?? which allows 7... ♕e5+ 8. ♔g1 ♕e1+ 9. ♔h2 ♕e5+ 10.g3 ♕e2+=

6... ♕h8 7. ♕e3+ ♔h7 8. ♕e6+-

2

▷ M. DLUGY
▶ J. BENJAMIN
USA, 1988



In this game, the king was exposed on h3, therefore he hides it next to his passed pawn.

62. ♕d3 ♔g7

Black has just a few checks 62...♔b2+ 63.♔c5 ♕f2+ 64.♕d4+- and the next check is already met by countercheck.

63.♔c5!

The king is going to support the pawn.

63...♕a5+ 64.♔c6

king comes to his passed pawn-the best strategy in Queens ends.

64...♔h6 65.♕b5 ♕c3+ 66.♕c5 ♕f6+

No more checks after 66...♕f3+ 67.♔c7+-

67.♕d6 ♕f5

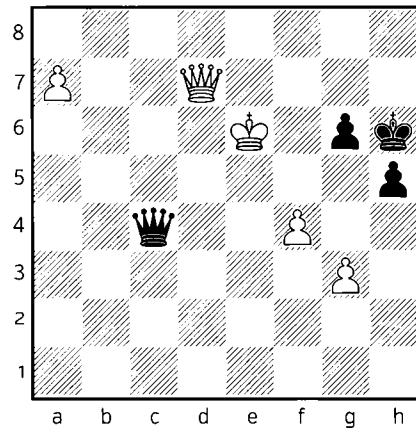
67...♕c3+ 68.♔d7 ♕g7+ 69.♔e8+- and ♕f8 protects against the checks.

68.a7

Only one step away from promotion. White must be careful now to not miss a check after which the pawn can be taken.

68...♕e4+ 69.♔c7 ♕c4+ 70.♔d8

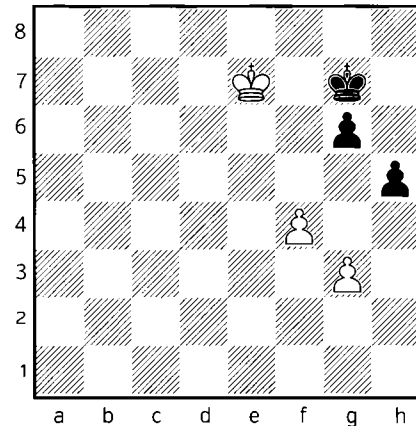
White uses the method of simplification for hiding his king. 70.♕c6 was also winning 70...♕f7+ 71.♕d7 ♕c4+ 72.♔d6 ♕d4+ 73.♔e6 ♕c4+



In many cases, the best shelter for the king is behind the opponent's pawns. This is another useful principle to remember. 74.♔e7 ♕c5+ 75.♔f7 ♕c4+ 76.♔f8 ♕c5+ 77.♔g8! ♕c4+ 78.♕f7+- and no more checks.

70...♕g8+ 71.♔e7! ♕a8

White had to calculate the pawn endgame after 71...♕g7+ 72.♔e8 ♕xa7 73.♕f8+! ♕g7 (73...♔h7 74.♕f7+ is the same) 74.♕xg7+ ♔xg7 75.♔e7!



White wins with the going behind the pawn technique! 75...♔h7 (75...g5 76.f5+-) 76.♕f7 ♕h6 77.♕g8 g5 78.f5+-

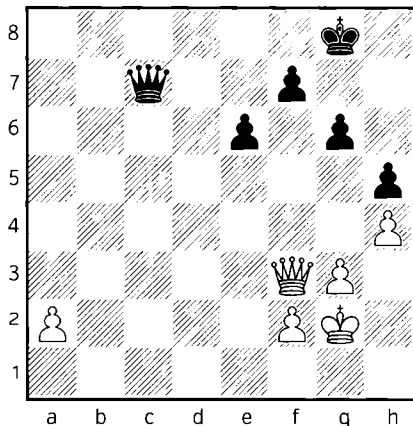
72.♚d4 ♚b7+ 73.♚d7 ♚b4+ 74.♔f7 ♚c4+ 75.♔f8 ♚c5+ 76.♔g8

Black resigned.76.♔g8 ♚c4+ 77.♚f7 ♚c8+ 78.♚f8+ ♚xf8+ 79.♔xf8+-

1-0

3

PRACTICAL POSITION



1. ♚a8+ ♔g7 2.a4

Seemingly everything is perfect from White's point of view to promote his pawn. The queen is ideally placed on a8 from where it controls all the checks on the long diagonal and in the meantime it supports the passed pawn until the 7th rank. As we know,

in such situations, the only chance for Black is to create counterplay against the king. To explode the structure around him in order to give somehow perpetual. Black holds the draw by playing

2... ♚c2 3.a5 e5!

The pawn must be advanced to e4 after which e3 is a big threat as well as ♚d3-f3 in some occasions.

4.a6 e4 5.a7

5. ♚a7 does not prevent the main threat 5...e3! 6. ♚xe3 ♚c6+=

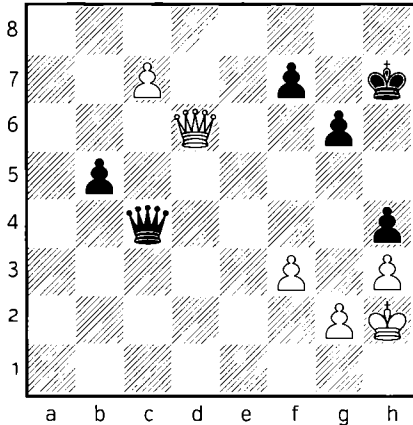
5...e3! 6. ♚f3 e2! 7. ♚e3

On 7.a8 ♚ Black can decide to make a draw with 4 queens on board or underpromote a knight.

7... ♚a2=

4

▷ G. MAROCZY
▶ E. BOGOLJUBOW
DRESDEN, 1936



A very instructive example: The c7 pawn is just before the promotion, but how to make the last step forward? The king cannot help now and the queen covers the important f4 square. Meanwhile Black is also pushing his b-pawn. We should always check where Black is going to give his checks if we allow them and calculate if there is perpetual check or just a few checks.

44. ♔d7!

White wants to promote his pawn and calculates correctly, that there is no perpetual check for Black, he is ready to run with his king through the board and hide it at the end between the black pawns...

44... ♚f4+ 45. ♔g1 ♚c1+ 46. ♔f2

Important to notice, that the queen controls the checks the on d-file, which highly reduces Black's chances for a successful defense.

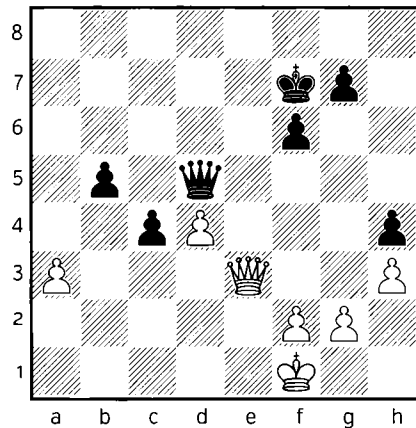
46... ♚c5+ 47. ♔e2 ♚c2+ 48. ♔e3 ♚c5+ 49. ♔e4

Black resigned in view of 49. ♔e4 ♚c4+ (In case of 49... ♚c2+ 50. ♔e5 ♚b2+ 51. ♚d4!+-) 50. ♔e5 ♚c3+ 51. ♔d5 ♚c4+ 52. ♔d6 ♚b4+ 53. ♔c6 ♚c3+ 54. ♔b7+- White uses the b5-pawn as a shield.

1-0

5

▷ BALLON
▶ MIKHALCHISHIN
BERN, 1995



Black has a powerful protected passed pawn on c4, but it is currently stopped. Black must find a way to support it.

41... ♖f5!

Black's task is to penetrate White's position with its Queen and with coordination of it to try to push forward its passed pawn c4. 41... ♖c6! was even stronger. Black is ready to push c3. The king cannot stop it because the g2 pawn is hanging en prise. While after 42. ♖c3 ♖e4!-+ Black occupies an excellent square with his queen.

42. ♔g1

42. ♔e1 would allow the simplification into pawn endgame 42... ♖e6 which works because of the c4 passed pawn. 43. ♔d2 ♖xe3+ 44. fxe3 ♔e6 45. ♔c3 (45. e4 f5-+) 45... ♔d5 followed by the undermining of the d4 passed pawn with f5-g5-f4 and the d4 pawn falls at the end.

42... ♖d3!

Black improves his position again by offering the trade of queens, which cannot be accepted.

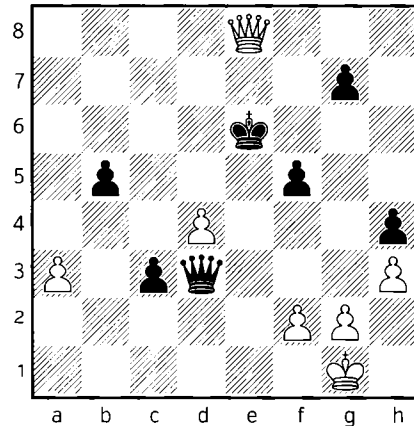
43. ♖f4

43. ♖xd3 cxd3 44. ♔f1 ♔e6 45. ♔e1 ♔d5 46. ♔d2 ♔xd4-+

43... c3 44. ♖g4

Trying to set Black into a perpetual check net with ♖d7-♔g8-♖e8-♔h7-♖h5. Black must delay the push of his passed pawn for a prophylactic move. There are no more checks after 44. ♖c7+ ♔g6-+

44... f5! 45. ♖h5+ ♔e6 46. ♖e8+



46... ♔d5!

As we know, in queen endgames we must always stay ready for long king walks and often the safest place for the king is between or behind the opponent's pawns.

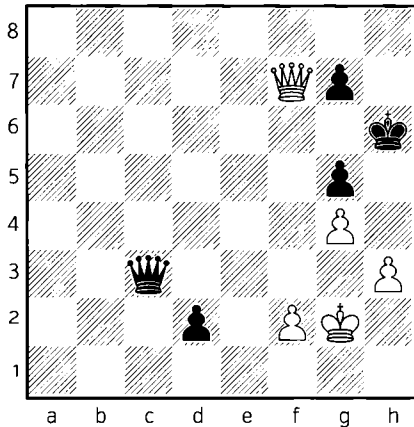
47. ♖e5+ ♔c4 48. ♖c5+

48. ♖e6+ ♔xd4 49. ♖d6+ ♔c4 50. ♖e6+ ♖d5 51. ♖e2+ ♔b3-+

48... ♔b3 49. d5 c2 50. ♔h2 ♖c4! 51. ♖e3+ ♔a2 0-1

6

▷ O. ROMANISHIN
▷ A. KARPOV
USSR, 1983



Anatoly Karpov realizes his advantage with great style. His main task for the moment is to prevent the mate threat on h5 and the different kind of perpetual checks.

52... ♕c6+!

Bringing the queen back to the defense.

53. f3

53. ♔g3 Or 53. ♔h2 loses to 53... ♕d6+ 54. ♔g2 ♔h7! 55. ♕f5+ (55. ♕h5+ ♕h6-+ is over) 55... g6 56. ♕f7+ ♔h8 57. ♕e8+ ♔g7-+ no more checks for White.

53... ♔h7!

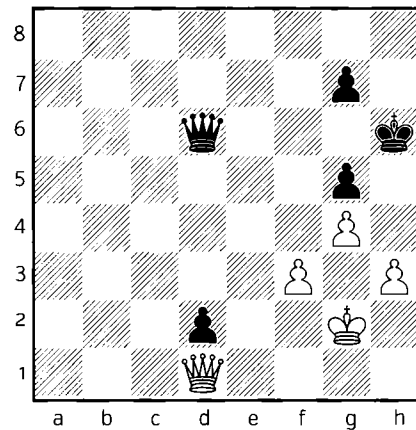
The e8 square is covered after ♕h5-♔g8.

54. ♕b3

White is forced to retreat into passivity. Usually when the queen has to block the passed pawn on the back-rank, it is already a sign, that something wrong is going to happen.

54. ♕f5+ ♕g6 55. ♕d5 ♕c2-+

54... ♕d6 55. ♕c2+ ♔h6 56. ♕d1



56... ♕d3!

Paralyzing White by preventing ♔f2-e2.

57. ♔f2

White cannot do anything else, then waiting with ♔f2-g2. Karpov finishes the game in style. He uses his king to promote the pawn.

57... ♔g6! 58. ♔g2 ♔f7 59. ♔f2 ♔f8!

Avoiding the last trap. Playing instantly 59...♔e7 is met by 60.♚e2+!

60.♔g2

And only now

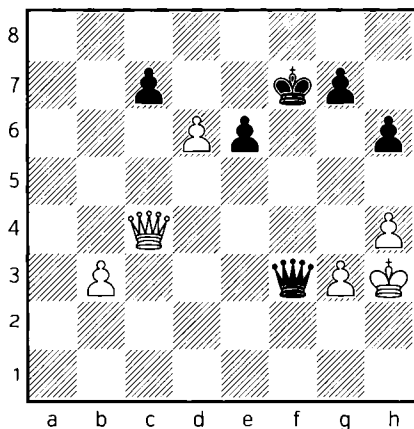
60...♔e7 61.♔f2 ♔d6 62.♔g2 ♔c5

White resigned in view of 62...♔c5 63.♔f2 ♔b4 64.♔g2 ♔c3 With the idea of ♚c2 and White can give only two checks 65.♚a1+ ♔b3 66.♚d1+ ♚c2+ An instructive example. We should remember, that passed pawns are the strongest when they are supported by both the king and queen.

0-1

7

▷ M. ADAMS
 ▶ M. CARLSEN
 LONDON, 2012



Black is a pawn up, but he still needs to work for the win. Carlsen makes a very important decision for the beginning.

43...♚h1+! 44.♔g4 ♚d1+ 45.♔h3 ♚xd6!

Black avoids creating a b-passed pawn for White. If we were in the middle-game, than cxd6 would have been the principled capture to create a healthy pawn chain, however, in this case, the duty of the c-pawn is to stop the b-pawn. 45...cxd6 46.b4

46.h5?

This is the decisive mistake. White should have foreseen that Black's idea is to play c5 followed by ♚d5 with a huge improvement on the current position. Therefore, the right move was 46.b4! with the idea of playing b5, fixing the pawn on c7. A potential exchange of the b- for the c-pawn could also improve White's chances for survival. 46...c6 (46...♔f6 47.b5 e5 48.♔h2 Black will have a much harder time making progress in comparison to the game, because the c7 pawn restricts the flexibility of the queen.) 47.b5 cxb5 48.♚xb5 Most probably, Black sooner or later would have transferred to this endgame, where I believe the drawing chances and Black's winning ones are roughly equal. When Black starts to advance his e-pawn, the king will always receive thousands of checks...

46...c5!

Of course, Carlsen immediately makes use of the previous mistake.

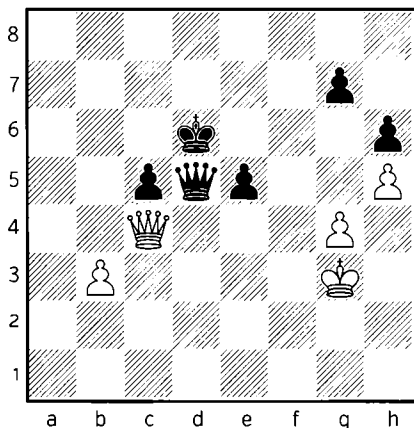
47.g4 ♔d4

Now the queen is forced to leave its active place, while the Black one on d4 covers the whole board.

48. ♖f1+ ♕e7 49. ♖f3 ♖d5 50. ♖c3 e5!

Black takes everything under control. The winning plan is quite easy: he simply drives his king to b5, plays ♖d4 and soon collects the b3 pawn as well. White doesn't have any counterplay.

51. ♕g3 ♕d6 52. ♖c4



52. ♕h3 ♕c6 53. ♕g3 ♕b5 54. ♕h3 ♖d4

52... ♖xc4!

Yes, the pawn endgame is winning, but requires exact calculation.

53.bxc4 e4!

Of course not 53... ♕c6 54. ♕f3 ♕b6 55. ♕e4 ♕a5 56. ♕xe5 ♕b4 57. ♕d5 and White wins.

54. ♕f4 e3!

Black gives up his material advantage in order to achieve opposition with the king.

55. ♕f3!

This was the tricky point of Adams with 52. ♖c4, however, it doesn't help. White only wants to take the pawn, so when Black plays ♕e5, then he is the one who gets the opposition and makes an easy draw. 55. ♕xe3 is hopeless. 55... ♕e5 and the Black king will penetrate on either side of the board. 56. ♕d3 (56. ♕f3 ♕d4) 56... ♕f4

55... ♕e6!

The e3 and e5 squares are „poisoned” for the kings. 55... ♕e5 56. ♕xe3 =

56. ♕e2! ♕f6!

The king is going to collect the g4 and h5 pawns, but White also takes the one on c5. The question is who will be the faster one.

57. ♕f3

57.♔xe3 still loses to 57...♔e5

57...♔g5! 58.♔xe3 ♔xg4 59.♔e4
♔xh5 60.♔d5 g5!

Black must push his g-pawn as it promotes with check after ♔xc5.

61.♔xc5 g4 62.♔d4

White wins an important tempo by being in the square of the g-pawn and is ready to promote his own pawn. However, Black wins with a known motif...

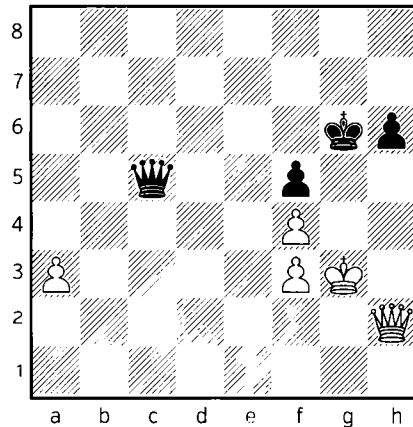
62...g3 63.♔e3 ♔g4!

White resigned in view of 63...♔g4 64.c5 ♔h3! 65.c6 g2 and would also arrive with check to c8, but Black is faster. 66.♔f2 ♔h2 Black had to foresee this position before trading the queens on c4. A perfect 15 moves of calculation.

0-1

8

▷ S. KARJAKIN
▶ A. NAIDITSCH
WIJK AAN ZEE, 2014



White has an extra pawn, however to convert it seems to be extremely difficult because of the doubled pawns on the f-file. Black's main hope is that the a-pawn is not advanced far enough at the moment and his queen is always threatening with different kind of perpetual checks. However Karjakin manages to deal with all this with very resourceful play.

61.a4!

The pawn needs to be pushed as far as possible, but White had to foresee the following couple of moves.

61...♔a7

Black attacks the a-pawn and keeps an eye on the g1 square to disturb

the king. 61... ♖a3 would simply have been met by 62. ♖c2±

62. ♖a2!

White is supporting his pawn from behind and at the same time he is sometimes threatening with ♖e6+ to win the f5 pawn.

62... ♖g1+ 63. ♖g2

White opens a new front to advance his king to h5! Black tries to avoid this idea.

63... ♖e1+

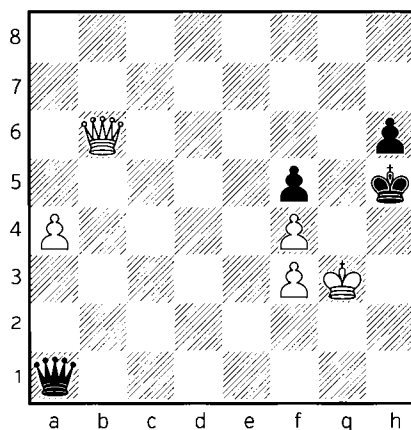
In case of 63... ♖a7 White plays 64. ♔h4+ ♔h7 65. ♖a2! and again White is ready to push his pawn, while Black has only one check... 65... ♖e7+ 66. ♔h3±;

63... ♖a1 64. ♔h4+! ♔f6 (64... ♔h7 65. ♔h5 leads to a similar scenario.) 65. ♔h5 ♖xa4 66. ♖g6+ ♔e7 67. ♖g7+ ♔e8 68. ♖e5+ White collects both pawns and obtains very good winning chances.

64. ♖f2 ♖a1

Black would like to keep the option of giving checks on the back rank. 64... ♖a5 does not change much: 65. ♖d4 ♖e1+ 66. ♔g2 ♖e2+ 67. ♖f2 White covers the squares. 67... ♖a6 68. ♖a2±

65. ♖b6+ ♔h5



Black is hoping for stalemate ideas, but his king soon finds himself in a mate net.

65... ♔h7 drops the f5 pawn after 66. ♖c7+ ♔g6 67. ♖c6+ ♔h7 68. ♖d7+ ♔g6 (68... ♔g8 69. ♖e6+ is the same.) 69. ♖e6+ and Black loses the f5 pawn with check, because 69... ♔g7 runs into 70. ♖e5+-

66. ♖e3!!

This brilliant resource gives White a winning position! White is threatening with mate in one on e8. 66. a5= is a draw on the spot as White cannot use his queen to avoid the perpetual because of the a5 pawn. 66... ♖e1+= is a draw on the spot as White cannot use his queen to avoid the perpetual because of the a5 pawn.

66... ♖h8

66... ♖xa4 67. ♖e6!+- is the point and Black cannot avoid getting mated!;

66...♔g6 67.♚e6+- wins.

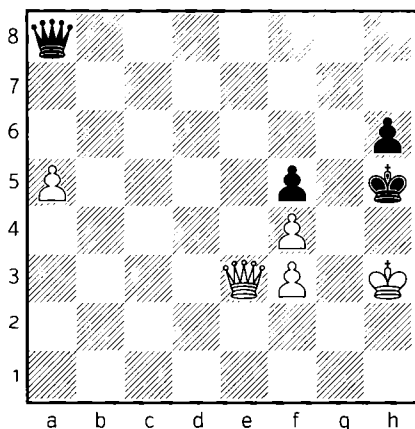
67.a5!

White is finally able to advance his pawn and it is very hard for Black to block the pawn and to cover the mate threats at the same time.

67...♚g8+ 68.♔h3

There is no hope for a perpetual at the moment.

68...♚a8



69.♚b3?

The only mistake by Karjakin... The subtle 69.♚e2!!+- would have won the game. Black cannot take the pawn and it is going to advance to a6 on the next move.

69...♚e8?!

After 69...♔g6! it is not obvious how White should proceed. There

is a temporary problem with the f3 pawn. 70.♚e6+ ♔g7 71.♚e5+ ♔g6 72.♔g3 ♚a6 Black is still in the game, although White should win with a good technique. 73.♚a1 ♔h7 74.♚a2 ♔g6 Other moves were not better either. 75.♚g8+ ♔f6 76.♚d8+ ♔g7 77.♚b6 ♚f1 78.a6 White advances the pawn and ♚e1 could be met by ♚f2 and then a7!

70.a6

The game is over now. The rest is easy.

70...♚e7 71.♚b1

71.♚b7 was also good: 71...♚h4+ 72.♔g2 ♚xf4 73.♚f7+ ♔h4 74.♚f6+ ♔h5 75.a7 ♚d2+ 76.♔h3+-

71...♔g6

71...♚h4+ 72.♔g2 ♚xf4 is refuted by 73.a7 ♚g5+ 74.♔f1+-

72.♚g1+ ♔h5 73.a7

The pawn is advancing slowly but surely.

73...♚a3 74.♔g3 ♚a5

74...♚a6 75.♚e3 ♚g6+ 76.♔h3+-

75.♚e3

White uses the same idea as when the pawn was still on a4.

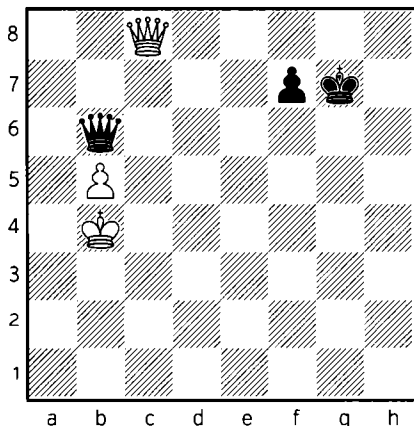
75...♚d8 76.♚e5 1-o

8.6. QUALITY VS QUANTITY

A very important rule in queen endgames, that the quality of the pawns are much more important, than the quantity. A well supported, advanced passed pawn is more valuable, than having material advantage.

1

▷ B. GULKO
▶ D. GUREVICH
USA, 1994



The material is balanced, but White is winning. Why? The quality of the b5 passed pawn is much higher because of two reasons. Firstly, it is more advanced and secondly, it is well supported by the queen and king.

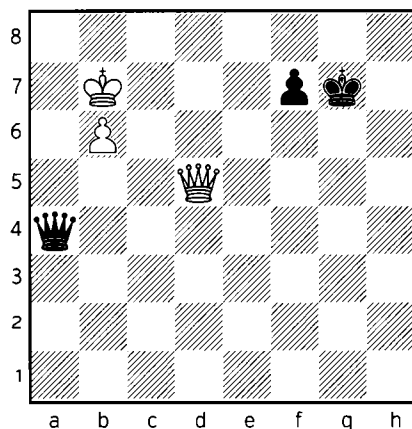
51. ♖c5! ♜e6 52. b6

We basically should evaluate this position like the f7 pawn is not existing, since it is so far from the promotion, that it cannot challenge the b-pawn. The only difference it might give is the protection on the 7th rank by counterchecks.

52... ♜e4+ 53. ♖c4 ♜b1+ 54. ♔c5

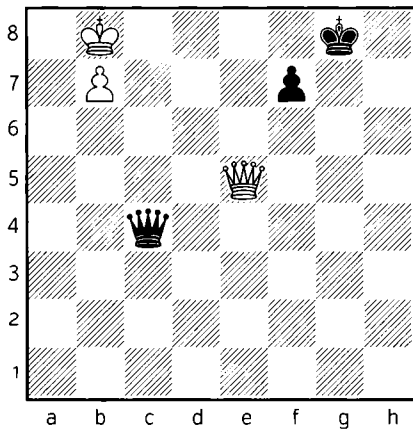
White will have no problems to find a shelter from the checks.

54... ♜f5+ 55. ♖d5 ♜c8+ 56. ♔b5
♜e8+ 57. ♔a6 ♜a4+ 58. ♔b7



58... f6?

A bad decision, now the king is unprotected from counterchecks on the 7th rank. The position was lost anyway, but the only practical chance was given with the pawn on f7. Let us see how Black loses with the f7 pawn. For example 58... ♜b4 59. ♜e5+ trying to provoke f6, but Black should be resistant 59... ♔g6 60. ♔c7 ♜c4+ 61. ♔b8 ♔h7 62. b7 ♔g8



So far everything went smoothly, but here comes the question, how should White escape his king without getting thousands of checks. The fastest way to convert according to the computer is quick shocking. White should get this position, but with Black to move. 63. ♖a7! ♜a4+ 64. ♖b6 ♜b4+ 65. ♖c7 ♜c4+ 66. ♖b8! and Black can only make his position worse with each move. Let's examine two examples, once when Black keeps his queen on c4 and moves with his king and another one with a queen move. 66... ♜c6 (66... ♜h7 Black has given the f8 square as a shelter for the white king! As we know, the king often hides between the opponent's pawns. White wins after 67. ♖a7 ♜a4+ 68. ♖b6 ♜b4+ 69. ♖c7 ♜c4+ 70. ♖d8! going

to f8! 70... ♜h4+ 71. ♖e8 ♜a4+ 72. ♖f8 ♜b4+ 73. ♜e7 the rest is easy, for example 73... ♜b6 74. ♖xf7+- and suddenly the black king is in mate net.) 67. ♜g5+ ♖f8 Black tries to control the f8 square, but now it moves into other motifs (67... ♖h7 loses again the same way like 66... ♖h7. The king goes to f8 after 68. ♖a7+-) 68. ♖a7 ♜a4+ 69. ♖b6 ♜b4+ 70. ♖c6 White plays for the countercheck on c5! 70... ♜a4+ 71. ♜b5 ♜e4+ 72. ♜d5 Centralizing the queen with tempo! 72... ♜a4+ 73. ♖c7 ♜c2+ 74. ♜c6+- and no more checks because of the countercheck on d6!

59. ♖b8 ♜f4+

59... ♜e8+ was met by 60. ♖c7+- and we already see the why the pawn should stay on f7. No more checks for Black.

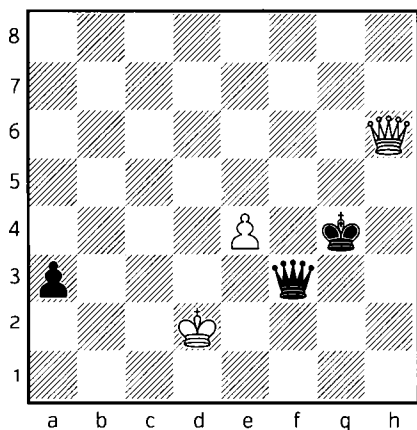
60. ♖c8 ♜c1+ 61. ♖d8 ♜f4 62. b7 ♜b8+ 63. ♖d7 ♖g6 64. ♜e4+ ♖g5 65. ♜e3+ ♖g4 66. ♜d4+

White checks himself to the c-file to be able to play ♜c7!

66... ♖g5 67. ♜c5+ 1-0

2

▷ WANG HAO
▷ B. GELFAND
BEIJING, 2013



The quality of the a3 passed pawn is clearly much higher the one on e4, but the white king is close enough to catch it. Still, the position is very tricky, White must be very precise to hold.

77...a2

Black does not need to worry, that White checks the pawn from g8, as it is indirectly protected by a queen check on the 2nd rank.

78. ♖g7+ ♔h3 79. ♖h8+ ♔g2
80. ♖g7+!

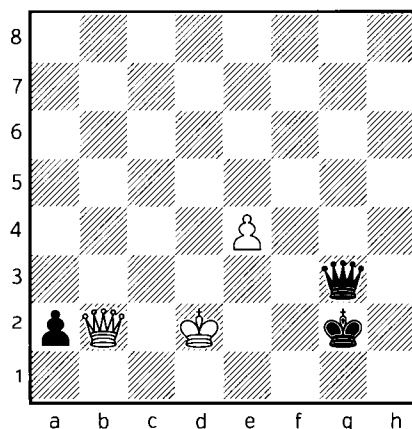
A very important check to disturb the coordination of the black pieces. If White goes immediately to 80. ♖a1 ♖f1! wins. This is the reason, why

White has to give a check on g7 first. 81. ♖g7+ ♔h1 82. ♖h8+ ♔g1-+ and no more checks. Black uses the standard method for preventing the checks by playing for countercheck.

80... ♖g3

Black tries his last chance. 80... ♔h1
81. ♖a1+ ♔h2 82. ♔c2=

81. ♖b2?



What a blunder!

81. ♖a1! followed by ♔c1 or ♔c2 was an easy draw. 81... ♖f2+ 82. ♔c1!= Only move, but good enough.

81... ♔h1!!

The only winning move! A beautiful one. Now White doesn't have ♖a1 anymore because of ♖g1 and Black is suddenly winning.

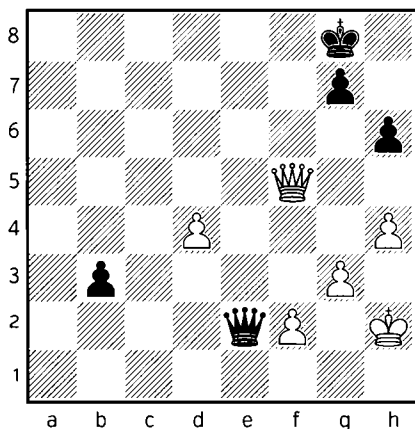
82. ♔c2 ♖g2+ 83. ♔b3 ♖xe4?

Missing the chance with a draw offer. 83... ♖g8+! was leading to an easy win: 84. ♔c2 (84. ♔a3 ♜a8+-; 84. ♔c3 ♜g7+ 85. ♔b3 a1♜ -+; 84. ♔b4 ♜b8+! 85. ♔c3 ♜e5+ 86. ♔b3 a1♜ -+) 84... ♜c4+ 85. ♔d2 After sending the white king to wrong square (away from the a2 pawn), Black wins with the known technique. 85... ♜f1! 86. ♜xa2 (86. ♜h8+ ♔g1-+ No more checks.) 86... ♜f2+ 87. ♔d3 ♜xa2-+

1/2

3

A. KARPOV
S. AGDESTAIN
GJOVIK, 1991



White is a pawn up, but the b3 pawn is more advanced, therefore Black should never be worried of losing this game. Anatoly Karpob makes a very bad decision, that instead of forcing a draw he keeps on playing on win.

55.d5?

White should have accepted that there is no win and play 55. ♜d5+ ♔h8 56. ♜xb3 ♜xf2+ 57. ♔h3 ♜xd4=

55... ♜c2!-+

The best square for the queen! By taking control over the b1-h7 diagonal Black assures both the safety of his king and the promotion of his pawn.

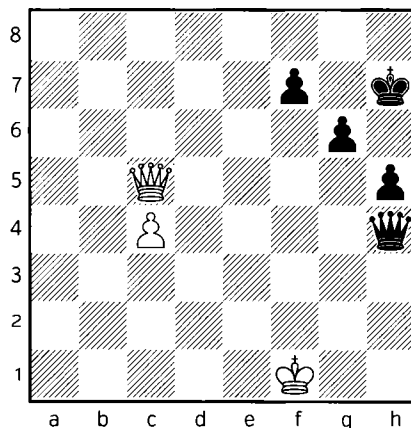
56. ♜f3

56. ♜e6+ ♔h7 57.d6 b2 58.d7 ♜xf2+ 59. ♔h3 b1♜ -+

56...b2 57.d6 b1♜ 58.d7 ♜bd1 59. ♜a8+ ♔h7 o-1

4

▷ L. FRESSINET
▷ C. BAUER
FRANCE, 2012



White pins his hopes to the c-passed pawn to compensate the material deficit, but the black pawn on h5 is equally far advanced as the c-pawn.

79. ♔d5 ♕f4+!

Black puts his queen in the best possible position...

80. ♖g1 h4

And he is the one who starts to advance his passed pawn first. The win should be technical.

81. c5 ♖g7 82. c6 h3

Black wants to advance his g-pawn as well, but he left from the ♕d3 check two moves before.

83. ♖h1 g5!

Here comes the support! The second black pawn decides the game immediately.

84. ♖g1

84. c7 has a concrete problem, that 84... ♕c1+ 85. ♖h2 ♕xc7+ check!

84...g4 85. c7 g3

White gets mated.

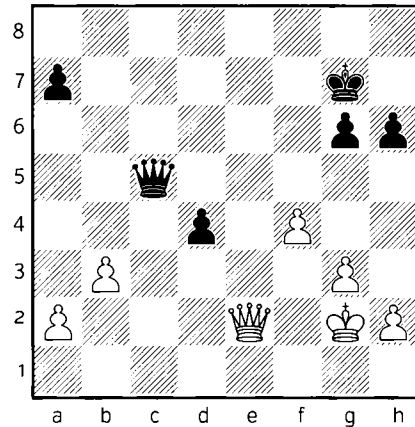
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5

▷ H. NAKAMURA

▷ S. KARJAKIN

WIJK AAN ZEE, 2013

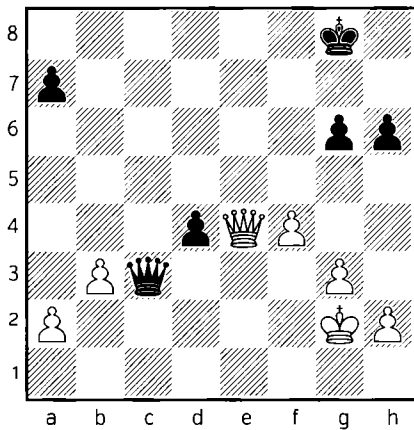


White has an extra pawn, but the passed pawn on d4 is the most dangerous on board. Black is not in danger to lose the game after the very strong

40... ♕c3!

Black shows clear understanding. The idea of most queen endgames is the same: try to bring your pawn as far as it goes and don't care about the other pawns. This is the strange thing about these endgames, one pawn can be stronger than 3-4 if it's more advanced. And what clearly doesn't lead to anything good is to choose a passive tactic in a queen endgame!

41. ♕e7+ ♖g8 42. ♕e4



46. ♚xh6+ ♔e8 47. ♚e6+ ♔d8
 48. ♚d6+ ♔c8 49. ♚e6+ ♔c7
 50. ♚e7+ ♔b6

Draw agreed and Black cannot avoid perpetual check 50...♔b6 51. ♚d6+ ♚c6 loses as the king catches the d2 pawn after exchange. 51...♔b5 52. ♚d5+ ♔b4 53. ♚d6+ ♔c3 54. ♚e5+ and Black cannot hide himself behind the a2-b3 pawns.

1/2

42...d3!

And again, Black is choosing the right way to play the position — to bring the passed pawn as far as possible. White can eat all the black pawns, but will this be enough for a full point!?

43. ♚xg6+ ♔f8 44. f5

White is also trying to be as fast as possible with his free pawn. 44. ♚xh6+ ♔e8 would not bring White anything and there is no way of holding Black's d-pawn...

- 44... ♚c2+!

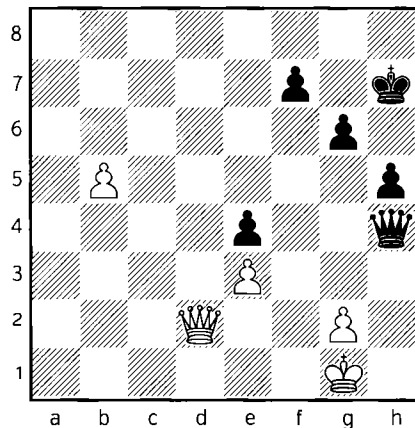
The last accurate move, not to give White even a chance for f6...

45. ♔f3 d2

Black reached what he wanted. The pawn is on d2 and White has nothing better than to „save” himself with a perpetual check.

6

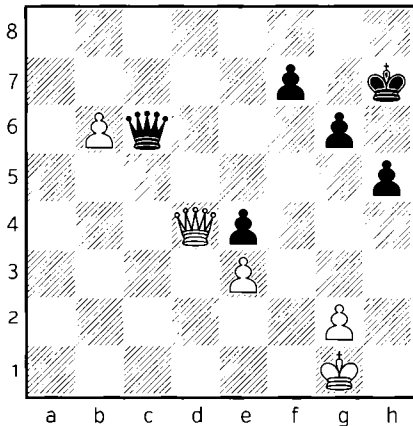
▷ H. NAKAMURA
 ▶ F. CARUANA
 TASHKENT, 2014



Black is a pawn up, but again it is him who needs to be careful, because the most dangerous passed pawn is clearly the one on b5. We have already seen the technique with which Caruana holds the endgame...

55...♔g5 56.b6 h4!

Black finds this very clever idea. He wants to sacrifice his h-pawn in order to expose the white king. The g2 pawn gives a safe shelter against the checks, but after removing it, Black can always hope for a perpetual. Some careless moves like 56...♕c5 57.♕d4 ♕c6 might lead to quick defeat after



58.♕b2! ♕b7 59.♕b5! followed by ♕c5-c7 and the b-pawn promotes.;

56...♕b5 57.♕d6 is also suspicious.

57.♕f2

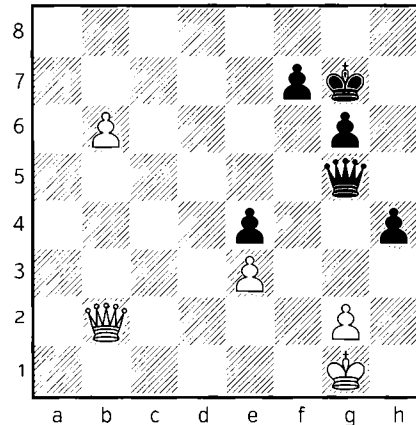
The best try. White improves his queen by attacking the f7 pawn. Black's point was that 57.b7? does not work immediately because of 57...♕b5! and White cannot protect his main triumph.;

57.♔h1 is met by 57...h3! 58.gxh3 ♕b5= and White is forced to allow perpetual check on f1-f2 after pro-

tecting the b-pawn with either ♕d6 or ♕d4.

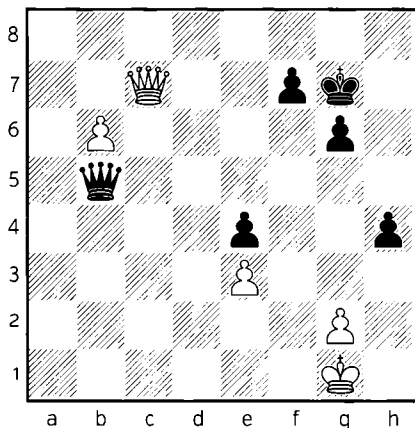
57...♔g7 58.♕f4

58.♕b2+ would have been a more tricky attempt.



58...♔g8!! It is quite difficult to find this move, since it is very illogical to move into the b8♕ check. (The most natural 58...♔h7 is strongly met by 59.♕b3! protecting the e3 pawn and attacking f7 with check. This causes Black some real problems, because after ♔g8 the b-pawn promotes with check, while ♔g7 loses to b7 h3 and ♕b2, protecting the g2 pawn with check and White queens next.) 59.b7 (Now on 59.♕b3 Black is in time to play 59...h3) 59...♕xe3+ and Black gives perpetual. 60.♔f1 If the king moves to the h-file, Black holds the draw with checks on g3 and e1. 60...♕d3+ 61.♔e1 ♕g3+ White cannot escape from the checks... 62.♔d1 ♕d3+ 63.♔c1 ♕f1+ 64.♔c2 ♕d3+=

58... ♔b5 59. ♕c7



White is ready to advance his pawn. His queen safely covers the h2-b8 diagonal from the checks after the king moves to h2. But here comes the whole point of Caruana’s defensive idea:

59...h3! 60.gxh3

60.b7 also leads to a draw after 60... hxc2 Black is threatening with ♕f1, therefore the next moves are forced: 61. ♖xg2 ♕e2+ 62. ♖g3 ♕f3+ with a draw.

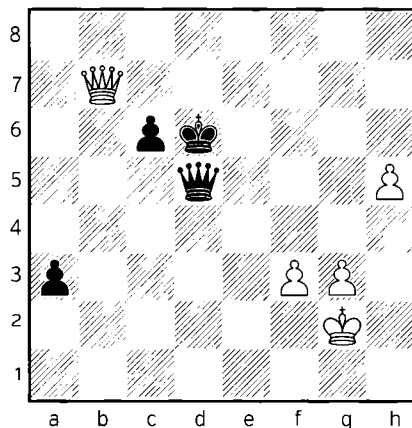
60... ♗b1+ 61. ♖g2 ♗b2+ 62. ♖g3 ♗f6!

Black cannot stop the b-pawn, but he can successfully play on perpetual check.

63.b7 ♗f3+ 64. ♖h2 ♗f2+ 65. ♖h1
1/2

7

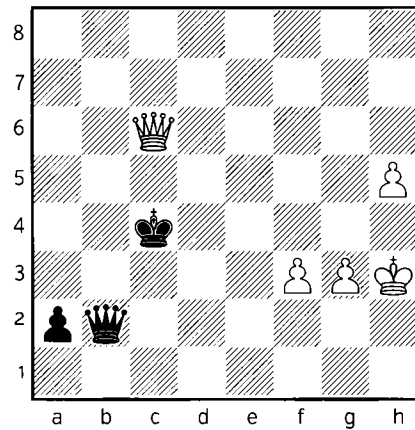
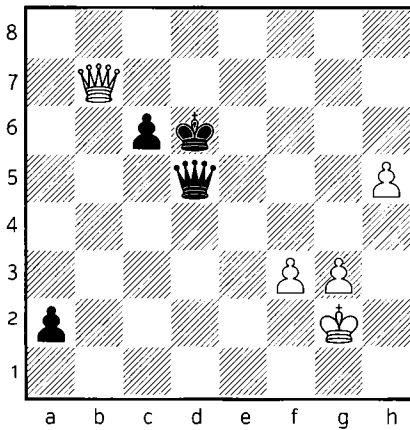
▷ L. CHRISTIANSEN
▷ U. ANDERSSON
SZIRAK, 1987



White is a pawn up, but from the quality point of view, the a3 passed pawn is the most advanced, therefore the only question is if White can save himself with perpetual check or not.

49... ♕d2+!

Andersson realizes his advantage with perfect technique. He transfers his queen to b2 first before advancing his passed pawn. 49...a2



could have strongly met by 50. ♖b2! an instructive defense! White is ready to push his h-pawn and for Black the only way to make progress is 50... ♗a5 but then the queen gets out of the game, which allows White to give perpetual check. 51. ♗d4+ ♔c7 52. ♗g7+ ♔b6 53. ♗b2+=

50. ♔h3 ♗b2 51. ♗a8 a2

The pawn is ready to promote, Black only needs to escape from the checks.

52. ♗d8+ ♔c5 53. ♗e7+ ♔c4 54. ♗e4+ ♔b3

Another way to win was 54... ♔b5 55. ♗d3+ (55. ♗f5+ ♔b6-+) 55... ♔b4 56. ♗d6+ (56. ♗e4+ ♔a5-+) 56... ♔c4! 57. ♗xc6+

57... ♔d3! We already know the technique of finding shelter behind the opponent's pawns. 58. ♗e4+ ♔d2 59. ♗d5+ ♔e2 60. ♗c4+ ♔f2 61. ♗c5+ ♔f1 62. ♗c4+ ♔g1 63. ♗c5+ ♗f2-+ No more checks, because of the countercheck on f1!

55. ♗e6+ ♔b4 56. ♗e7+ c5 57. ♗e4+

57. ♗b7+ ♔c3 58. ♗g7+ ♔c2-+ Black goes again behind the f-pawn.

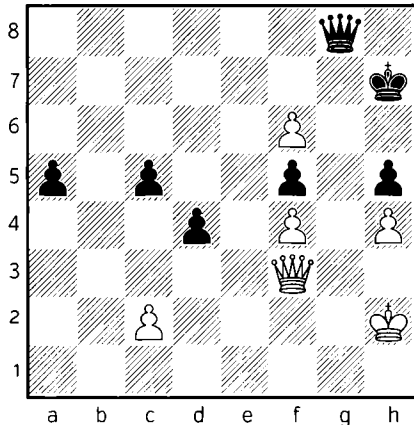
57... ♗d4 58. ♗e1+ ♔b3

White resigned as ♗e6 is the last check because of c4.

0-1

(8)

▷ Y. KRYVORUCHKO
 ▶ S. BOGDANOVICH
 UKRAINIAN CHAMPIONSHIP,
 2014



Black makes a serious mistake in terms of maintaining the advantage.

40... ♖g4?

Black does not pay attention on the very important rule of queen end-games, that the quality of pawns is much more important than the quantity! The key element of this game is the pawn on f6. Any other white pawns are irrelevant, but as long as that one is on the board, White will have all the chances to secure enough counterplay to hold, despite being momentarily a pawn down and later it will be even more... Black should have eliminated the dangerous passed pawn with 40... ♖f7! 41. ♖c6

c4 followed by ♔g6. Black has good chances to win.

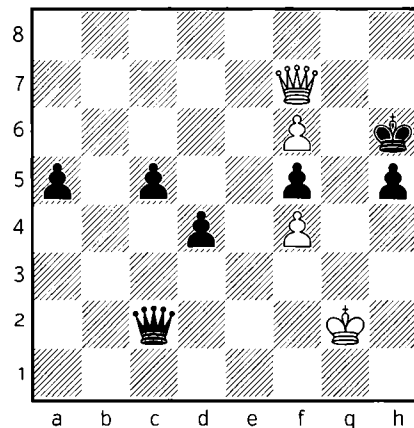
41. ♗b7+!

White must play actively and pin all his hopes to the f6 pawn. Defending the h4 and f4 pawns passively equals resignation.

41... ♔h6 42. ♗f7!

That is the point! White is ready to give a check on f8 and then according to the circumstances give more checks or advance the f-pawn, which will then only be one square away from promotion.

42... ♗xh4+ 43. ♔g2 ♗g4+ 44. ♔h1 ♗d1+ 45. ♔g2 ♗xc2+



Black collects all the pawns with check, he is already 3 pawns up, but his position is not winning. The f6 pawn is too strong.

46. ♖g1 ♜c1+ 47. ♘g2 ♜b2+ 48. ♖g1
 ♜a1+ 49. ♘g2 ♜b2+ 50. ♖g1 ♜b1+
 51. ♘g2 ♜e4+ 52. ♖g1 ♜e1+ 53. ♘g2
 ♜e4+ 54. ♖g1 ♜e3+ 55. ♘g2 ♜e2+
 56. ♖g1 ♜g4+ 57. ♖h1 ♜h3+ 58. ♖g1
 ♜g3+ 59. ♖h1

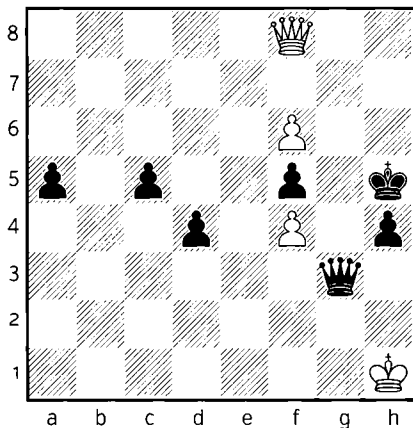
At this point, Black should have realized that he cannot win, but it is very difficult to admit this when you have such a big material advantage. Black continues to play for a win, but he soon turns out to be losing...

59...h4

With the idea to open an evacuating path for the king along h5-g4 and to threaten h3 and ♜g2 mate. 59...d3 is met by 60. ♜f8+ ♖h7 61. ♜f7+ with perpetual check.;

59... ♜g6 60. ♜f8+ ♖h7 61. ♜e7+ (61. f7 is also good enough because of the ♜e7 threat.) 61... ♖g8 62. ♜d8+ ♖h7 63. ♜e7+ also holds by perpetual.

60. ♜f8+ ♖h5?



Consequent, but this could have been the decisive mistake. Black should have allowed perpetual check with 60... ♖h7 61. ♜f7+=

61. ♜e8+!

Suddenly the f-pawn turns out to be too strong and White is winning in a study-like way.

61... ♖g4

It is already too late to turn back with 61... ♖h6 as it loses to 62. ♜h8+ ♖g6 63. ♜g7+ ♖h5 64. ♜xg3 hxg3 65. f7+-

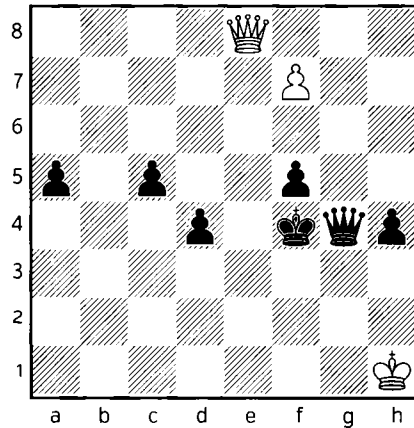
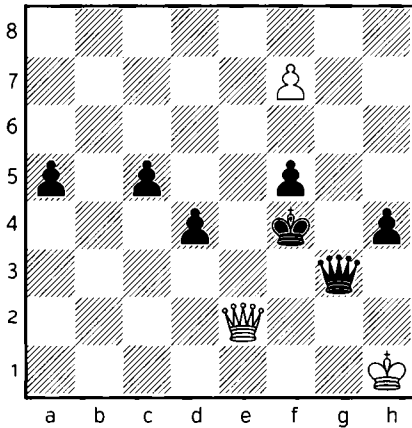
62. ♜e2+!

The first thing is to guarantee the king's safety and then White can advance his f-pawn. Black probably blundered this check when he went 60... ♖h5. 62. f7? is premature in view of 62... ♖f3! threatening with mate on g2. 63. ♜g8 could be a saving idea, but not in this position, because of (63. ♜a8+ ♖f2 and mate follows in the next move.) 63... ♖f2!! creating the threat of ♜h3. 64. ♜xg3+ hxg3 65. f8 ♜g2+ 66. ♖h2 g1 ♜+ 67. ♖h3 ♜g3#

62... ♖xf4

62... ♖h3 loses more easily because of 63. f7 ♜g7 (63... d3 64. ♜f1+ ♖g4 65. f8 ♜+-) 64. ♜h2+ ♖g4 65. ♜g2+-

63. f7!



A very nice position. White is fighting with 1 pawn against 5, but that one is the most advanced and the most relevant one.

63... ♖g7!

The best chance again! 63... ♖h3+ runs into a countercheck with 64. ♖h2+ ♗xh2+ 65. ♕xh2+-;

63...d3 64. ♖f1+- and f8 ♗ next.

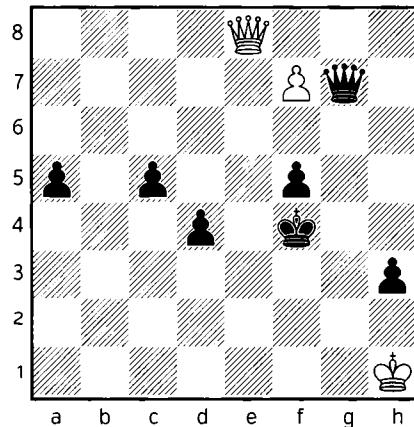
64. ♖e8!

It is very important to have the ♖g8 option for White to avoid getting mated on g2. 64. ♖e7 is met by 64... ♕f3 and White is forced to give a perpetual here: 65. ♖b7+ ♕f2 66. ♖b2+ ♕f3 67. ♖b7+=

64... ♖g4!

Black finds the most tenacious defense again, which brings him back the half point for the huge risk he has taken before. 64... ♕f3 loses to 65. ♖g8! ♖e5 66.f8 ♗ and Black has only one check. 66... ♖e1+ 67. ♖g1+-;

64...h3



is tricky, but it fails to 65. ♖b8+! White drives the king to a wrong place before playing ♖g8! (The direct 65. ♖g8 allows 65... ♖e5! 66.f8 ♗ ♖e1+ 67. ♖g1 ♖e4+! This is the key and the reason why White needs to

give a check on b8 first. 68. ♔h2 ♖e2+
69. ♘h3 ♖h5+ 70. ♘g2 ♖f3+ 71. ♔h2
♖h5+= with a perpetual.) 65... ♔f3
66. ♖g8+- without the check on e4,
Black is lost.

65.f8♖?

White returns the favor, since Black has a perpetual check now... The winning move was 65. ♖b8+! ♔e3 (65... ♔f3 66. ♖g8!+-) 66. ♖g8! (Still not 66.f8♖ ♖f3+ 67. ♔h2 ♖f2+ 68. ♔h3 ♖f3+= and White cannot take on h4 in view of ♖g4!) 66... ♖e4+ (66... ♖f3+ 67. ♖g2+- no more checks as ♖d1 runs into ♖g1 check!;

66... ♖h3+ 67. ♔g1+- and there are no more checks for Black.) 67. ♔g1 ♖b1+ 68. ♔h2 ♖a2+ 69. ♔h3+- and once again, the game is over.

65... ♖f3+ 66. ♔g1 ♖g3+ 67. ♔f1 ♖f3+ 68. ♔e1 ♖c3+!

The king cannot escape from the checks...

69. ♔f1 ♖f3+ 70. ♔e1

A very nice final example for the topic on Quality is more important than Quantity in queen endgames.

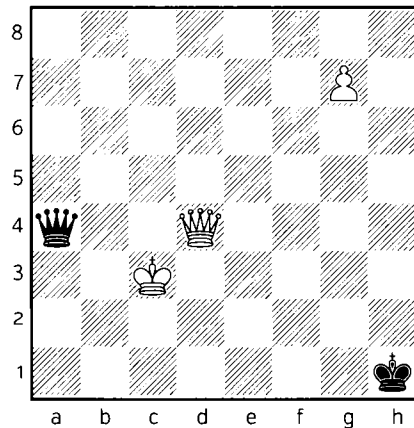
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8.7. PERPETUAL CHECK

Perpetual check is one of the most important resource for the defensive side in the queen endgames. There are as less pawns around the king as better the chance is to give perpetual check. It often happens, that the stronger side has an unstoppable passed pawn and the only chance remains to give perpetual check. In this case we should also consider some sacrifices with the intention of exposing the king.

1

SPEELMAN



This exemplary composition by Speelman is a perfect demonstration for the situation when the king must protect another piece, but then he cannot avoid getting perpetual check.

1... ♖a1+! 2. ♔d3 ♜d1+! 3. ♕e3 ♜g1+!
4. ♕e4 ♜g4+! 5. ♔d5

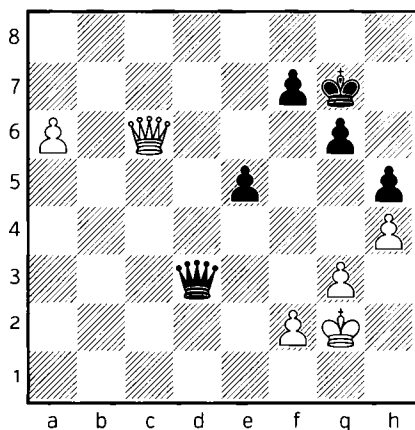
5. ♕e5 ♜xg7+=

5... ♜d7+! 6. ♕c5 ♜a7+! 7. ♕c4 ♜a4+!
8. ♕c3 ♜a1+!

We can see the power of the queen when it controls the full board.

2

PRACTICAL POSITION



White tries to promote his passed pawn with the standard procedure. He puts his queen on the long diagonal to avoid getting checks and in the same it supports the pawn. We must keep in mind, that the only chance for survival is the perpetual check, which can be achieved by

1...e4!

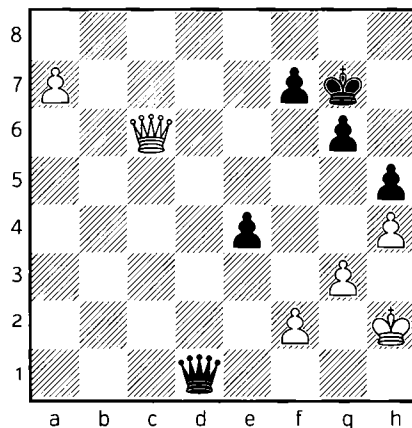
By closing the long diagonal, Black is prepared to give ♜f3 check.

2.a7

White has two more attempts to win: 2. ♜a4 with the idea to support the pawn from behind and in the same time controlling the d1 square in case of ♜f3 ♕g1. 2...e3! Black explodes the pawnstructure around the king 3.a7 (3.fxe3 ♜e2+=) 3... ♜d5+! (But not 3... e2? 4. ♜a1+!+- and a8 ♜ next.) 4. ♕g1 e2 (4...exf2+ 5. ♕xf2 ♜d2+ 6. ♕f3 ♜d3+ 7. ♕f4 ♜f1+ is actually also a perpetual.) 5. ♜a1+ f6 6.a8 ♜ ♜xa8 7. ♜xa8 e1 ♜+=;

2. ♜b6 with the idea to protect the f2 pawn. ♜f3 can be answered by ♕h2 now. However Black still holds after 2...e3! using the fact, that the queen cannot capture as it drops the a6 pawn. 3. ♜b2+ ♕h7 4.a7 and draw can be achieved for instance by 4... ♜e4+ 5.f3 ♜a4 6. ♜b7 ♜a2+ 7. ♕h3 e2=

2... ♜f3+ 3. ♕g1 ♜d1+ 4. ♕h2



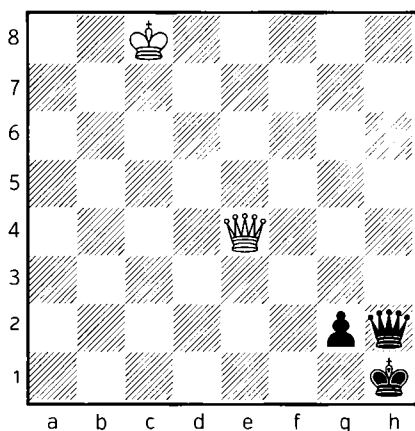
There are no more checks, but

4... ♔d4!=

We should keep this motif mind! This is quite common in practice. The a7 is under attack and ♕xf2 will already end in perpetual check.

3

PRACTICAL POSITION



Another famous draw is when the queen gives perpetual check to the king in the corner.

1. ♕e1+! g1 ♔ 2. ♕e4+!

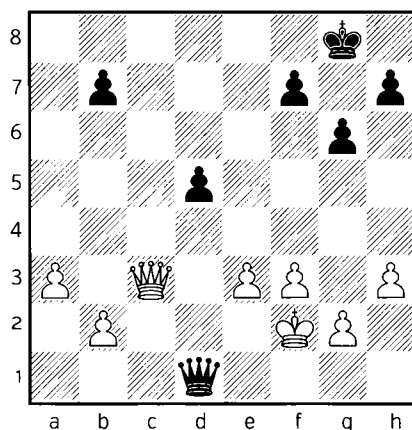
Black has two queens, but there will be always checks on e4-h4-e1.

2... ♕hg2 3. ♕h4+ ♔1h2 4. ♕e1+ ♕gg1 5. ♕e4+

etc. The same draw can be reached on other triangles, like d1-d5-h5, c1-c6-h6, b1-b7-h7 or let's say with a king on c4, a1-a8-h8 triangle.

4

▷ A. ALEKHINE
▷ G. MAROCZY
NEW YORK, 1924



White should have a technical win after the centralization with 30. ♕d4 as it was recommended by Alekhine. However he greedily went for the second pawn with

30. ♕c8+?! ♔g7 31. ♕xb7??

It was not too late to admit the inaccuracy with 31. ♕c3+

31... ♕d2+ 32. ♔g3

And Black survived after

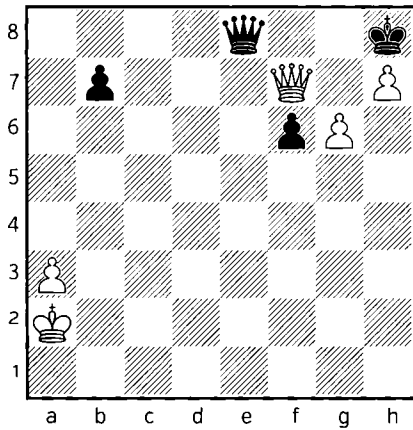
32...d4! 33.exd4 ♖g5+

Draw agreed. As the following lines show, White cannot escape from the perpetual check. 33... ♖g5+ 34. ♔h2 ♜f4+ 35. ♔g1 ♜c1+ 36. ♔f2 ♜d2+ 37. ♔g3 ♜g5+=

1/2

5

▷ C. BALOGH
▷ J. VAN FOREEST
GERMANY, 2016



After some thinking, I just played ♜d5-f7. We already know, that in queen endgames, we must stay ready for long runs with the king to escape from the perpetual. I have foreseen that I will be able to cross the 5th rank with the king and according to my calculations I should have been able find a shelter for my king, however both me and my opponent missed a hidden draw for Black...

52... ♜e2+

Black has no choice, he must give checks and hope that it lasts forever, otherwise he gets mated.

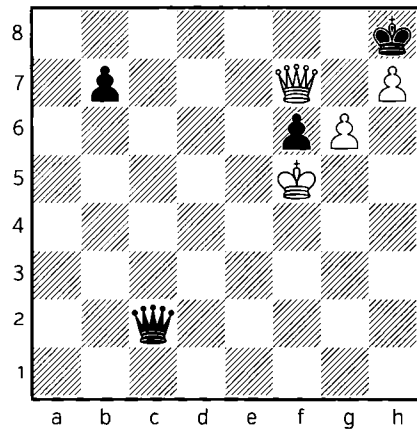
53. ♔b3 ♜b5+ 54. ♔c3 ♜c5+ 55. ♔d3

I had to give up the a3 pawn with check. At first sight it does not affect the outcome as the question remains the same whether Black can give perpetual check or White finds a shelter and wins.

55... ♜xa3+

55... ♜d6+ 56. ♔c4 ♜c6+ 57. ♔d4 ♜d6+ 58. ♜d5 ♜f4+ 59. ♜e4 ♜d6+ 60. ♔c4 ♜c7+ 61. ♔b5 I had such plans in mind when I entered into the endgame.

56. ♔e4 ♜a4+ 57. ♔f5 ♜c2+



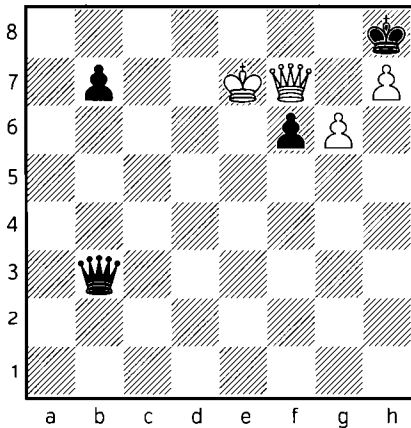
58. ♔e6!

White should aim to keep both black pawns on board to get a shelter behind them from the checks. A simple line to show the importance of the f6 pawn is 58. ♔xf6 ♖c3+ 59. ♔e7 ♖c7+ and now after 60. ♔f8 Black has 60... ♖d8+ 61. ♖e8 ♖f6+!= with the f6 pawn it would be just over, while now it is draw.

58... ♖b3+

58... ♖c6+ 59. ♔e7 The defensive attempt with 59... ♖c7+ does not save Black 60. ♔f8 ♖d8+ 61. ♖e8 ♖c7! Otherwise the king moves and the discovered check wins the game. 62. ♖e7 ♖c8+ 63. ♔f7 ♖c4+ 64. ♖e6 ♖c7+ 65. ♔e8 ♖b8+ 66. ♔d7+- no more checks and ♖e8 wins next move.

59. ♔e7



Everything went according to plans so far. I managed to get my king behind the black pawns and my pre-calculations told me that the game will be over soon. However here comes the

shocker, which immediately changed my evaluation...

59... ♖a3+!!

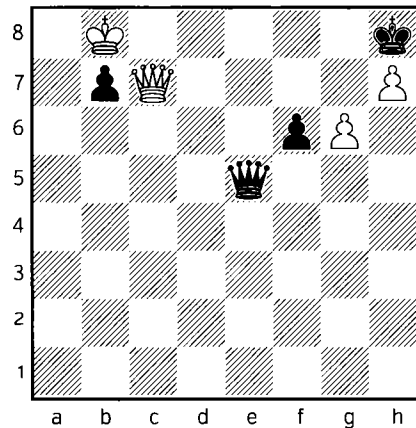
Black only gives checks along the a-file which deprives me from the chance to get my king to f8. My last attempt was to hide behind the b-pawn. 59... ♖b4+? 60. ♔e8+- and after any checks ♔f8 wins next move.

60. ♔e8 ♖a8+!

This is the point! I cannot reach the f8 square.

61. ♔d7 ♖a4+ 62. ♔c8 ♖c6+?

After this blunder the game is over. Black could have saved himself with a study-like draw 62... ♖a8+! 63. ♔c7 ♖a5+ 64. ♔b8 ♖e5+! (64... ♖d8+ 65. ♔xb7+- Black has no more checks. He can neither make stalemate for instance with ♖c7 because the f6 pawn is still on board!) 65. ♖c7



And now 65...b5!! This is the move, which makes the entire endgame after 52.♖f7 to be a draw! We will get the point soon... 66.♜xe5 fxe5 67.♙c7 b4 68.♙d7 b3 69.♙e7 b2 (But not 69...♙g7? because of 70.h8♜+! ♙xh8 71.♙f7+-) 70.♙f7 b1♜ 71.g7+ ♙xh7 72.g8♜+ ♙h6= and the queen protects the mate on g6.

63.♙b8 ♜d6+ 64.♜c7! ♜e5

Too late. Black is missing one tempo. 64...♜xc7+ 65.♙xc7 f5 66.♙d6 f4 67.♙e6 f3 68.♙f7 f2 Black is missing one tempo... 69.g7+ ♙xh7 70.g8♜++-

65.♜xe5!

Black promotes his pawn first, but he gets mated...

65...fxe5 66.♙c7 e4 67.♙d7 e3 68.♙e7

Black resigned in view of 68.♙e7 e2 (If 68...♙g7 69.h8♜+! ♙xh8 70.♙f7+-) 69.♙f7 e1♜ 70.g7+ ♙xh7 71.g8♜+ ♙h6 72.♜g6#

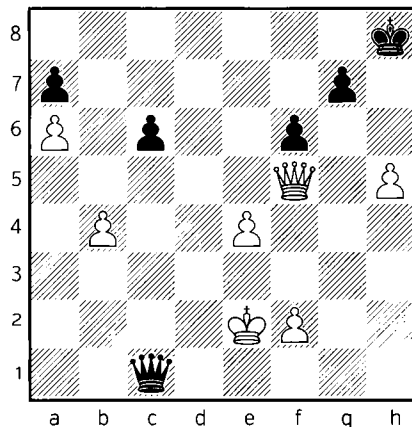
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8.8. ACTIVE QUEEN

Activity is very important in the queenendgames, just as in any other endgames or we can also say in chess itself. We should always aim for activity.

1

▷ A. MIKHALCHISHIN
▷ S.R. CVETKOVIC
TRNAVA, 1988



1.h6!!

Main task at the moment is to expose opponents King.

1...♜c4+

After 1...♜xh6 2.♜c8+ ♙h7 3.♜xc6± pawns are becoming unstoppable.

2.♙f3 ♜xa6

Slightly better would be 2...♜xb4 3.hxg7+ ♙xg7 4.♜d7+ ♙g6 5.♜xc6±

3.e5!!

Another blow with the same idea-to open the King. Nothing gave 3.♜g6 ♜d3+ 4.♙g2 ♜d7 5.hxg7+ ♜xg7 6.♜xg7+ ♙xg7 7.f4 ♙f7=

3... ♖a3+

or 3... gxf6 4. ♖xf6+ ♔h7 5. ♖f5+ ♔g7
6. ♖d7+ ♔g6 7.e6+-

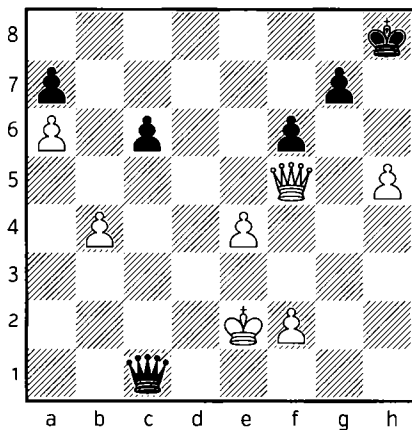
4. ♔g2 ♖xb4 5.exf6! gxf6 6. ♖c8+
♔h7 7. ♖d7+ ♔g6 8. ♖g7+ ♔h5 9.f7

9.f7 ♖e4+ 10. ♔h2 ♖f4+ 11. ♔g1 ♖c1+
12. ♔g2+-

1-0

2

▷ A. MIKHALCHISHIN
▷ S. R. CVETKOVIC
TRNAVA, 1988



White is a pawn up, but Black has an active queen and the pawns are vulnerable on a6 and b4. Additionally the king is also a bit exposed on e2, therefore Black has all the hopes to hold. However the next move is demoralizing from Black's point of view.

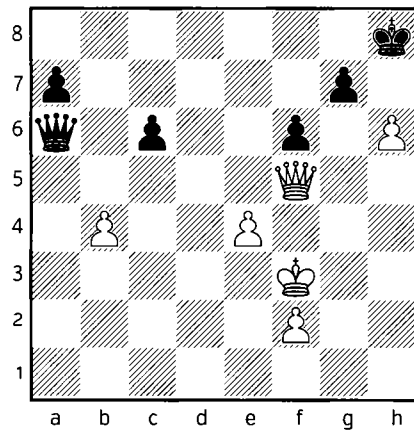
1.h6!!

White wants to use his active queen on f5 and he explodes the structure around the h8 king.

1... ♖c4+

After 1... ♖xh6 2. ♖c5! White either takes on c6 or a7, it is going to be a favorable exchange for him. In both cases he obtains a passed pawn.

2. ♔f3 ♖xa6



2... ♖xb4 is strongly met by 3. ♖d7! gxf6 (3... ♖a3+ 4. ♔g2 gxf6 5. ♖xa7 and the a-pawn decides the outcome.)
4. ♖c8+ ♔g7 5. ♖b7+- winning simplification!

3.e5!

Another blow with the same idea — to open the King.

3... ♖a3+

3...gxh6 loses to 4.exf6! and the pawn cannot be stopped. 4...♖a3+ 5.♔g2 ♖xb4 transposes to the game.;

3...fxe5 4.♖f8+ ♔h7 5.♖xg7#

4.♔g2 ♖xb4 5.exf6! gxh6 6.♖c8+ ♔h7 7.♖d7+ ♔g6 8.♖g7+ ♔h5 9.f7

Black resigned, as he soon runs out of checks. 9.f7 ♖e4+ 10.♔h2 ♖f4+ 11.♔g1 ♖c1+ 12.♔g2+-

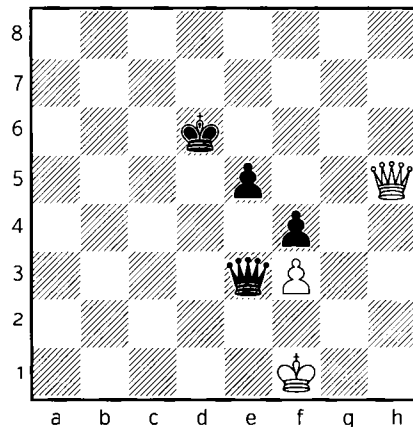
1-0

8.9. ACTIVE KING

As we already know, in queenend-games the kings are also playing a very important role. They can cross the entire board by running from the checks, meanwhile they might collect pawns or support the passed pawn. Sometimes they find shelter behind the opponent's pawns. We should not be afraid of using our king on different purposes. Of course, we should always be careful, as we have seen in the „Mating ideas” chapter sometimes a brave run ends with a painful selfmate.

1

▷ D. RAJKOVIC
▷ S. SKEMBRIS
SOFIA, 1986



Black has an extra pawn, but he cannot make progress without his king. The queen alone cannot strengthen the pressure on the f3 pawn and creating a passed pawn with e4 is not enough because the white king is ideally placed on f1. Therefore Black correctly activates his king!

1...♔c5

The white queen is poorly placed, it cannot take part properly in the defense as it has to protect the f3 pawn. If it was on b7, we would speak about a completely different story.

2.♖h3 ♔b4!

Avoiding all the checks with which White could bring his queen back to the game.

3. ♖g4 ♔c3 4. ♖c8+

The queen enters, but it is already too late. The king has arrived.

4... ♔d2 5. ♖a8

No more checks with 5. ♖d7+? ♖d3±+

5... ♖d3+ 6. ♔f2 ♖d4+ 7. ♔g2

7. ♔f1 does not change anything 7... ♔e3! there is no check, while after 8. ♔g2 e4! the f-pawn is already decisive because of the support of the black king. 9. ♖xe4+ ♖xe4 10. fxe4 ♔e2!-+

7... ♔e3 8. ♖a3+ ♔e2

Black uses again the method of putting his king on the same line where the opponent's king is. He avoids checks like this.

9. ♖a6+

9. ♖a2+ ♖d2 10. ♖a6+ ♔e3+-+

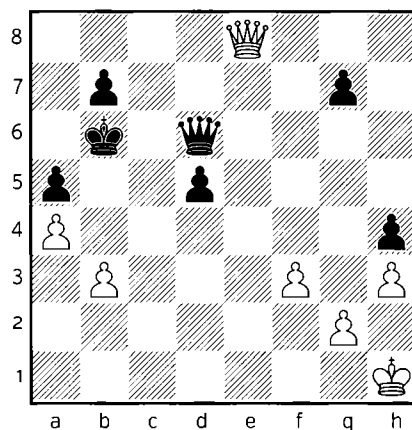
9... ♖d3 10. ♖c6 e4!

Transposing into winning pawnendgame or creating decisive passed pawn. White resigned in view of 10... e4 11. fxe4 (11. ♖xe4+ ♖xe4 12. fxe4 f3+-+) 11... f3+ 12. ♔h2 f2-+

0-1

2

▷ M. MATLAKOV
▶ V. KRAMNIK
QATAR MASTERS, 2015



We will see a very instructive endgame lesson by Kramnik. We can name a few general principles of the queen endgames, what Kramnik is going to use. As in all the endgames, passed pawns are playing a very important role, Black has one on d5, while White is very far from creating one. A well supported passed pawn is much more important, than the material. If Black could advance his d-pawn, he would not mind to lose all his other pawns. The material is balance, but Kramnik shows with great technique the power of the d5 passer.

57... ♔c5!!

Kramnik breaks in with his king! Between the b3-a4 pawns, it will be hidden from the checks and it will

also be close enough to support the d-pawn. 57...d4 allows White to exclude the black king from the game with 58. ♖b5+ ♔a7 59. ♗xa5+ ♖b8 White runs out of checks, but he blocks the d-pawn in time with 60. ♕g1! d3 61. ♗d2= followed by ♕f1, White holds. The Black king is too far to help.

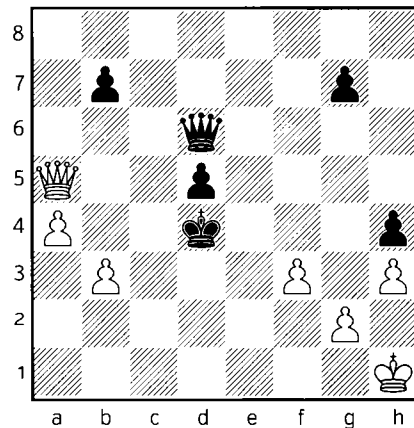
58. ♖b5+

58. ♕g1 demonstrates well, that with an active black king the situation is not the same anymore as it was in the previous line 58...♕b4! 59. ♗b5+ ♔a3 Black is ready to advance his pawn and in any moment he can take on b3 after which the a4 also falls. 60. ♗xb7 For Black it is only important to preserve his d-pawn, the b7 and any others do not count. 60...♗c5+ 61. ♕f1 ♗c1+ 62. ♕e2 d4! with excellent winning chances.

58... ♕d4

The king temporarily blocks his own pawn, but it soon hides himself on the queenside.

59. ♗xa5



59... ♕d3!

Kramnik is ready to give up all his pawns (now the b7 is hanging after ♗b5 check), he only cares about supporting his passed pawn properly with all his pieces!

60. ♗b5+

60. ♕g1 is too slow again 60...d4 61. ♕f1 ♕c2 White does not even have a check and the pawn continues marching.

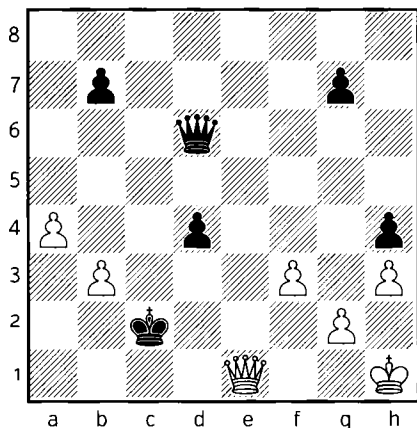
60... ♕c3 61. ♗a5+

Matlakov invites his opponent to grab his queenside pawns in order to be able to give dozens of checks and not be hidden by his own pawns. 61. ♗xb7 was met by 61...d4 62.a5 (62. ♗xg7 ♕c2-+ and d3 next.) 62...d3 63.a6 d2-+ Black is faster.

61... ♕c2!

Kramnik resists to the temptation and continues focusing on the support of his d-pawn instead of being materialistic.

62. ♖e1 d4



63. ♕e2+

White finally manages to force Black to take his queenside pawns, otherwise the king cannot hide away from the checks.

63... ♖xb3

63... ♖c3 64. ♕e1+ Black sooner or later needs to take on b3.

64. ♕d1+ ♖b4 65. ♕b1+ ♖xa4

65... ♖c5?? would have been a nice gift to Matlakov on Christmas day, but of course Kramnik does not give such presents :) 66. ♕b5#

66. ♕xb7

White could have tried to give perpetual check with 66. ♕a2+ although Black runs away with some precise moves 66... ♖b5 67. ♕b3+ ♖c6 68. ♕c4+ ♕c5 69. ♕e6+ ♖c7 70. ♕f7+ ♖b6 71. ♕e6+ ♕c6 72. ♕b3+ ♕b5 73. ♕e6+ ♖a7 74. ♕a2+ ♕a6 and finally there are no more checks.

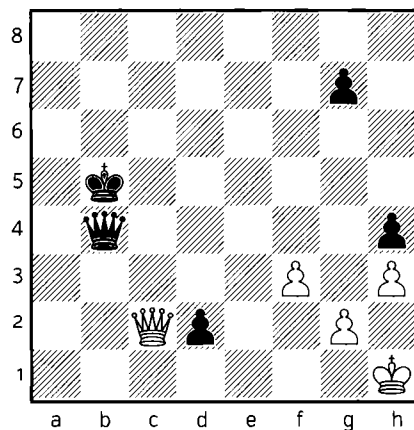
66...d3

The material is still balanced, but the position is not equal until the the d-pawn is on board.

67. ♕b2

White soon runs out of checks after 67. ♕a7+ ♖b3 68. ♕b7+ ♕b4! 69. ♕f7+ ♕c4! 70. ♕b7+ ♖c2-- the pawn and the queen gives a perfect shelter for the king and Black soon promotes his pawn.

67...d2 68. ♕a2+ ♖b5 69. ♕b2+ ♕b4 70. ♕c2



70... ♕d4!

The perfect square for the queen! In the center it controls all the important diagonals, lines and ranks and in the same time it supports the d-pawn. White has only a few checks and then he is obliged to block the pawn on d1, but such passive defends already indicates, that it is going to be the end of the game.

71. ♔b3+ ♕c5 72. ♔c2+ ♕b4 73. ♔d1

73. ♔b1+ ♕a3–+ No more checks!

73... ♔b2!

White resigned as ♔c1 and the new queen is coming next! A very instructive endgame for all of us!

0-1

NOTES

NOTES

NOTES



Adrian Mikhalchishin, FIDE Trainers Commission Chairman from 2009, was born on 18th of November 1954. Grandmaster since 1978.

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